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Report of the Secretary of War; being part of the message and documents communicated to the two Houses of Congress at the beginning of the second session of the Forty-ninth Congress : Report of the Secretary of War, 1886

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REPORT
OF THE
SECRETARY OF WAR;

BEING PART OF
THE MESSAGE AND DOCUMENTS

COMMUNICATED TO THE
TWO HOUSES OF CONGRESS
AT THE
BEGINNING OF THE SECOND SESSION OF THE FORTY-NINTH CONGRESS.

IN FOUR VOLUMES.

VOLUME I.

WASHINGTON:
GOVERNMENT PRINTING OFFICE,
1886.

1870

THE HISTORY OF THE UNITED STATES

OF THE UNITED STATES OF AMERICA

BY

THE HISTORY OF THE UNITED STATES

OF THE UNITED STATES OF AMERICA

IN FOUR VOLUMES

VOLUME I

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ANNUAL REPORT

OF

THE SECRETARY OF WAR.

WAR DEPARTMENT, *November 30, 1886.*

To the PRESIDENT:

I have the honor to submit the following annual report of the administration of this Department:

EXPENDITURES, APPROPRIATIONS, AND ESTIMATES.

The expenditures of appropriations under direction of the Secretary of War, by requisition upon the Treasury, during the fiscal year ending June 30, 1886, were as follows:

Salaries, contingent expenses, stationery, rent, and postage.....	\$1,992,469 95
Military Establishment: Army, and Military Academy, including the sum of \$410,684.07, credited to the Pacific railroads for transportation services rendered the War Department during the fiscal year 1886 and prior years.....	24,297,500 58
Public works, including river and harbor improvements.....	6,294,305 43
Miscellaneous objects.....	4,406,627 92
Total	36,990,903 38

The sum of \$1,208,016.46 pertaining to War Department appropriations was carried to the surplus fund June 30, 1886.

The appropriations for the War Department for the fiscal year ending June 30, 1887, are:

Salaries, contingent expenses, stationery, rent, and postage.....	\$1,972,051 65
Military establishment—Army, and Military Academy.....	24,081,768 21
Public works, including river and harbor improvements.....	16,723,446 69
Miscellaneous objects	3,250,275 30
Total	46,027,559 85

The estimates of the War Department for the fiscal year ending June 30, 1888, are as follows:

Salaries, contingent expenses, stationery, and postage.....	\$2,116,375 00
Military establishment—Army, and Military Academy.....	25,847,689 57
Public works, including river and harbor improvements.....	17,108,106 76
Miscellaneous objects	3,196,664 48
Total	48,268,835 81

The principal item of increase in the estimates for "Salaries, contingent expenses, &c.," over the appropriations for the present fiscal year is for furnishing the west and center wings of the State, War, and Navy Department building, \$130,000. In the Army estimates that for pay, &c., of the Army is increased \$365,000. No provision was made in the last Army appropriation act for the pay of enlisted men detailed as cooks and nurses in hospitals, and an estimate of the amount (\$70,262.50) required for this necessary service during the present fiscal year will be submitted. The cost of transportation of the Army during the fiscal years 1884, 1885, and 1886, has exceeded the regular appropriations therefor, and additional amounts are required to complete the service of those years. The estimates for public works include for armament of fortifications, \$4,645,000; improving harbors and rivers, \$10,175,870, and \$150,000 for a building for the Signal Office.

The statement appended to this report shows in detail the appropriations under the direction of the War Department for the fiscal year ending June 30, 1886; the amount appropriated under each title of appropriation, the amount drawn by requisition upon the Treasury, and the balances subject to requisition July 1, 1886.

THE ARMY.

The Lieutenant-General reports the Army at the date of the last consolidated returns, to consist of 2,103 officers and 23,946 enlisted men, divided as follows:

	Officers.	Enlisted men.
Generals.....	10	.....
General staff.....	573	1, 212
Ten regiments of cavalry.....	411	6, 942
Five regiments of artillery.....	272	2, 473
Twenty-five regiments of infantry.....	836	10, 721
Indian scouts.....		595
Detachments, recruiting parties, &c.....		2, 003
Total.....	2, 103	23, 946

During the year the Army and the country have been called to mourn the death of Major-General Hancock. He was a brave and accomplished soldier, who served with great distinction in two wars, and was thanked by Congress for his gallant, meritorious, and conspicuous share in the great and decisive victory at Gettysburg. He also had in full measure the respect and love of all his countrymen. Due military honors were paid to his memory throughout the country.

In the Division of the Atlantic little has occurred of military importance, the duties of the soldiers being mainly confined to garrisons along the sea-coast, and to the care of forts. The general commanding the division recommends the concentration of the light batteries in his command for their better instruction and discipline, and arrangements are in progress by which this may be done. He also calls attention to

the condition of the fortifications and armaments under his command and their absolute inefficiency. The necessity of repairs, both of barracks and quarters, in this division is also imperative. In selecting a place for the imprisonment of the Apache Indians recently captured it was found difficult by reason of inadequacy of barracks and quarters and their want of repair to find a proper post for their confinement. The quarters for officers and men at the Dry Tortugas, built to accommodate a large garrison, are in an uninhabitable condition, and at many other places buildings are decaying and going to ruin for want of the necessary appropriations to repair them. It is safe to say that in the event of a sudden call to furnish shelter to any considerable number of troops in this division they could not be provided for, mainly because of the want of repair of existing buildings.

Under the appropriations of the last session the enlargement of Fort Niagara and the reconstruction of Fort Porter have been begun; and the work upon the new post at Atlanta, Ga., has been continued. These improvements will contribute much to the comfort of the troops of this division; and by the abandonment of small, unimportant, and inconvenient posts now occupied for shelter merely, and by concentrating the troops in larger numbers at these new and other important places, it is hoped that good results will be obtained, not only in their discipline, but in reduced cost of maintaining them.

In the Division of the Missouri, now under the command of Major-General Terry, no important changes have occurred, except the permanent transfer of the district of New Mexico to the Department of Arizona, and the transfer of Brigadier-General Miles from the Department of the Missouri to the Department of Arizona, in place of Brigadier-General Crook, relieved at his own request and assigned to the Department of the Platte.

There have been no hostilities or serious disturbances in this division during the past year. But constant vigilance has been required of officers and men. In Montana it has been necessary to prevent raids by Indians into other reservations, and to protect agents and secure settlers from roving bands who have escaped from or have been permitted to leave their reservations. In Colorado, north of Fort Lewis, difficulties have occurred, and it was necessary to establish two summer camps in the Blue Mountain region, by which precautions the fears of settlers have been allayed and all danger avoided.

In Utah last winter the White River Utes and the Uncompahgres on the Uintah and Uncompahgre Reservations became very turbulent and rebellious, resisting the authority of the agent. At the request of the Secretary of the Interior an investigation was made by an officer of the Army, and four companies of infantry and two of cavalry were stationed at a cantonment, which has been named Fort Du Chesne, at the junction of the Grand and Du Chesne Rivers. These precautions have had the desired effect; the Indians are now quiet and the authority of the agent

appears to be restored. The troops have not, however, been withdrawn.

In the Indian Territory the settlement effected through the visit of the Lieutenant-General in July, 1885, with the Cheyennes and Arapahoes has given comparative peace to that region, and the Indians are quiet and contented. Still the constant presence of troops is necessary to preserve this present status, and to prevent, especially in the Oklahoma country, the seizure of the land by settlers and its invasion and occupancy by herds of cattle. There seems but little hope of improving this condition of things, in view of the avidity with which this fertile country is coveted by the settlers and the cattlemen, and the duty resting upon the Government to keep inviolate its agreements with the Indians for whose benefit it has been set apart. Congress alone can give the needed remedy, and in the interest of good government it is earnestly hoped by all who have executive duties to perform in this Territory that speedy action will be taken.

During the past year Fort Steele, in the Department of the Platte, and Fort Ellis, in the Department of Dakota, have been abandoned, and their garrisons removed to other and more important places. It is very desirable to reduce the number of small posts, and the appropriations made at the last session for the enlargement of Forts Riley, Russell, and Robinson, and the post at San Antonio, will render it possible, in the interest of economy and good discipline, to make still further reductions in their number.

In the Division of the Pacific, now commanded by Major-General Howard, the principal change that has occurred has already been noticed—the adding of New Mexico to the Department of Arizona and the assignment of Brigadier-General Miles to its command in place of Brigadier-General Crook.

In Washington Territory, upon the requisition of the Governor, troops were ordered to Seattle to protect public property and suppress, if necessary, riotous outbreaks that appeared to be imminent and threatening, arising from an attempt to drive the Chinese from that city and other places in the neighborhood. The troops remained there for some time; their presence quieted the disturbances; the power of the civil authorities was re-established, and the troops were withdrawn without being called upon for any active duty.

In the Department of Arizona, from the date of my last report until early in September, the troops and all the military resources of the department have been employed in pursuing and finally capturing Geronimo and his band of outlaws. In November last Geronimo and his band were in Mexico, making occasional inroads into this department, committing murders and other crimes, and undoubtedly communicating with and receiving aid and encouragement from the remainder of their people, the Chiricahua and Warm Spring Apaches, who had not left the reservation of San Carlos. The removal of these Apaches to some secure

place, far away from Arizona, had been the subject at that time of frequent conference between this office and the Secretary of the Interior. Not a mere temporary removal was contemplated, but a permanent withdrawal of these warlike and dangerous Indians from a Territory to the prosperity and security of which they had been a constant menace from the time of the Camp Grant massacre in 1871. The Secretary of the Interior recommends such removal in his report to Congress in 1885. The matter had also been discussed with the Lieutenant-General, who was not then prepared to recommend their forcible removal. In November last he brought the matter to my attention, and it was decided that he should go to Arizona and advise with General Crook upon this and other questions touching the situation. He left on November 22, 1885, and having consulted with General Crook, and also with Capt. Emmet Crawford, Third Cavalry, both of whom considered that the time was inopportune for such an attempt, he deemed it best, in deference to their opinion, to await a more advantageous opportunity for the accomplishment of this purpose. Captain Crawford was then on the point of starting in pursuit of Geronimo with 200 Indian scouts, many of whom were Chiricahuas, from the reservation. Captain Crawford considered that the removal might have a bad effect upon the scouts, in whom both he and General Crook placed great confidence. The report of the Lieutenant-General, sent at that time to me, gives a graphic account of the situation:

I arrived at Fort Bowie, the headquarters of General Crook, November 29, and learned that the area of country covered by raids from the hostile Chiricahua Apaches comprises about 30,000 square miles in our territory, and lies between the Gila River on the west and the Rio Grande on the east, the thirty-fourth parallel on the north and the Mexican line on the south. This region is all in Southeastern Arizona and Southwestern New Mexico, and is the scene of the murders and depredations that have been committed at various times since the Chiricahuas—42 men and 94 women and children—went on the war-path last May, and its area is prolonged into the Sierra Madre Mountains of Northern Mexico, a distance south of about 400 miles and extending east and west 200 miles.

The whole extent of territory in this country and Mexico in which the hostiles roam and raid comprises about 80,000 square miles. It is a region of rough, broken, and bold mountain ranges, and numerous spurs, with an occasional plain, little vegetation, and naturally watered only at a few points by springs and water-holes at great distances apart. Each range of mountains and its spurs furnish splendid points of lookout over the plains to the far-seeing and keen-eyed Apache, and wonderfully add to the difficulties of pursuit, and as his nimble foot and natural instincts enable him to surmount the rugged and arid features of the country and travel in any direction, it is not strange that he often evades and escapes from his pursuers. He is a mountain or foot Indian, bred from childhood to climb the highest peaks or cross the driest plains, and accomplish journeys without other food than roots or berries and little or no water. When on the war-path, or one of his peculiar raids, he goes "light," wearing little or no clothing, carrying no rations, and encumbering himself only with his gun and ammunition, and traveling over the roughest region on foot as much as 60 miles a day. It is only of recent years that the horse has become his auxiliary, but even now, when pressed, he kills and abandons him and flees on foot over almost impassable trails.

When a band becomes hostile they start suddenly and almost always in a southerly direction for Mexico, and having almost invariably a start of several hours in advance of any knowledge on the part of the troops stationed near their agency, attack and murder such isolated persons as they may meet on their route, and supply themselves with horses and plunder at ranches that have been opened up within recent years. Hot pursuit is ordered from every direction, but to halt them long enough for a fight is most difficult. The moment they are attacked they disperse in as many different directions as there are individuals, to come again together at some previously-arranged point a hundred miles distant. The trail is then lost, and our troops, with the aid of Indian trailers, endeavor to pick them up by cutting the main direction they have taken, but success in this does not often go beyond the capture of a few women and children.

Previously to three years ago the scene of these Apache raids was sparsely settled, and the loss of life and property was, consequently, much less than during the present outbreak. But few horses and cattle were in the country. Now the Indians obtain all they desire in the way of animals without difficulty, as large herds are located at every spring and water-hole, and every few miles new mounts of fresh horses are at their service. Many of the settlers have failed to realize the dangers of their situation. They are often unarmed, and travel from ranch to ranch and town to town—distances of from 20 to 40, 60, and 100 miles—alone and carelessly. Prospectors present to the wily Apache even a more tempting condition, and in almost every instance their murders have been visited upon people who were thus isolated and unprotected and unarmed, and this doubtless accounts for the unusual number of whites that have been butchered since the last outbreak of the Chiricahuas. To protect these people and kill or capture Geronimo's band of Apaches has been the problem before General Crook; and while his success has not met with satisfactory results, he has accomplished much towards their final destruction, considering the many difficulties of the situation, and I have every hope his present plans and operations will permanently end all trouble with the Chiricahuas.

The original number of males that escaped from the agency was 42. Eleven of these have been killed by our troops, and 31 women and children captured. This leaves still out 31 males and 63 women and children. All of the women and children are in Mexico, in the Sierra Madre Mountains, and all of the males are there also but 10. These 10—11 originally, but 1 was killed near Fort Apache recently—are those who committed the murders during the recent raid.

An expedition under Capt. Wirt Davis, of the Fourth Cavalry, a good officer, is now in Mexico, with a force of friendly Apache scouts, endeavoring to locate the camp of the hostiles, steal upon them unawares and accomplish their destruction. He is possessed of information which leads to the belief that his efforts will be successful. Another force of scouts started November 29, from Fort Bowie, under Captain Crawford, to intercept the 10 raiders recently in the vicinity of the San Carlos Reservation and now on their way back to Mexico. He has seventy days' rations with him, and will operate similarly to Captain Davis and in conjunction with him. The obstacles to be overcome in the Sierra Madres are beyond the comprehension of persons unacquainted with that rugged region, but I have confidence the best results may be looked for.

In the area north of the Mexican line which has been subjected to disturbances there are and have been for some time nearly 3,000 troops, three-fourths cavalry. They are stationed at nearly all the known springs and water-holes, and cover, by scouting, patrolling, and observation, a region of 40,000 square miles in every direction practicable for the operations of white men.

Inclosed herewith is a map showing their stations. No more troops can, in the opinion of General Crook, be successfully utilized, and no better dispositions can be made. All are on the alert, and each detachment takes up the trail on the first information, but owing to the character of the country it is often found that their best efforts are futile against an enemy so familiar with the mountains, so wily in his in-

stinets, and so small in numbers that his warfare partakes more nearly of those characteristics belonging to the bushwhacker or bandit than those of any other species of outlaw to whom he can be likened. General Crook knows them well, and his familiarity with all that pertains to the situation is such that I feel confident he will work out a solution of the troubles. It will take time, however, and there may be more innocent lives lost, but it should be remembered that almost all of our frontier settlements have been compelled to pass through similar ordeals whenever advanced to the immediate vicinity of the wild Indian.

The fact that the murders and depredations have occurred within the geographical limits of two different military departments has made operations a little embarrassing to each military commander, neither having full control. To remedy this defect, I recommended the temporary transfer of the District of New Mexico to the Department of Arizona. This you have directed, and as General Crook has now undivided authority, I have reason to hope the responsibility it involves will be met and assumed with that energy, fearlessness, and tact which he has always shown, and will bring good results.

In the execution of the Lieutenant-General's instructions to pursue, capture, or destroy the hostiles under Geronimo, a sad and unexpected encounter with a body of Mexican troops, said to have been pursuing the same object, led to the death of Captain Crawford. He was a soldier of great endurance, energy, and courage, admirably fitted for the work he had undertaken. His untimely end in an obscure skirmish, and in the very act of calling a parley, is sadly to be deplored as a loss to the Army and the country.

Captain Crawford had organized a battalion of White Mountain and Chiricahua Indians at Fort Apache on the 9th of November, 1885, and with Lieutenants Maus and Faison, First Infantry, Lieutenant Shipp, Tenth Cavalry, and Assistant Surgeon Davis, entered Mexico on December 11, intending to find and attack the hiding place of the hostiles in the Great Sierra Madre Range. Along his route reports were constantly brought in of depredations by the hostiles. On the 9th of January last Captain Crawford with his command on foot came upon their camp near the Rio Haros and attacked it that night, but the hostiles became alarmed before the movement to surround them was complete, and escaped to the mountains. The next day, January 10, they sent in a squaw to make arrangements for a meeting between Natchez and Captain Crawford on the 11th. During the pursuit Captain Crawford had given them no rest, and had exhibited perseverance and intelligence in the highest degree. The Indians were dispirited and worn out by his pursuit, and finding him close upon their trail, and knowing his character and ability, there is little room to doubt that the result of the meeting between Crawford and Natchez would have been the absolute surrender of the hostiles and the closing of this campaign, so full of all that makes Indian wars horrible.

But the meeting was not destined to occur. Early on the morning of the 11th a body of Mexican soldiers attacked Crawford's camp, wounding one of our scouts. The officers succeeded in stopping our return fire in about fifteen minutes, and Captain Crawford and an interpreter,

Mr. Horn, went forward for a parley. While it was in progress, suddenly, and without warning, the Mexicans opened fire, wounding Captain Crawford mortally and the interpreter in the arm. The Mexicans continued to fire for an hour and a half, and only consented to reply to our officers after it was evident they could not capture our position. Captain Crawford and his officers all wore uniforms, but without insignia of rank. The general opinion of the white men with Crawford's command was that they must have known that Crawford was a white man and soldier of the United States. The Mexicans were irregular and not national troops, and asserted that they were following the trail of the hostiles, and seeing the Indian scouts thought they were the Indians they were pursuing.

The matter was referred at the request of this Department to the Mexican Government by the Department of State, and many communications on the subject have passed between the two Governments. The Mexicans deny all the statements made by our officers, say that they were the attacked and not the attacking party, and that they had no knowledge who Crawford was or of his command. They also assert that they were in sight of Crawford's camp, and that no fight with the hostiles took place as stated by our officers. They declare that all the depredations in Mexico were committed by Crawford's scouts and not by the hostiles, and that the animals lent them by Lieutenant Maus after Crawford was shot, on which to carry away their wounded, were animals stolen from them by Crawford's command.

It may be stated here that the Mexican Government demands indemnity for depredations alleged to have been committed by Crawford's command—the stealing and killing of cattle, marauding upon inoffensive inhabitants, breaking down and burning fences, &c. The only claim thus far made on the part of the United States is based upon the proceedings of a board of survey, which found that on the day following the engagement in which Crawford was killed Lieutenant Maus was “compelled by these irregular Mexican troops to turn over to them a number of mules and their equipments under circumstances which rendered it quite impracticable for him to have done otherwise.” The report of Lieutenant Maus is published with the reports of General Crook.

The proceedings of this board, approved by the Secretary of War, were furnished to the State Department on October 25 for such action as the Secretary of State might deem proper. The negotiations are now pending between the Department of State and the Mexican Government, and the matter is therefore no longer in the hands of the War Department. The subject of the correspondence with the Mexican Government has been in reference to the killing of Captain Crawford, and the return of the horses and mules loaned to the Mexican troops or payment of their value. No definite result has yet been announced.

The whole region over which these Apaches have for years carried on their murderous raids, and over which we have the right by convention with Mexico to pursue them, has been demoralized to such an extent, and the arm of authority is so powerless, that lawlessness is rather the rule than the exception. That the conduct of the Mexican irregulars was utterly unjustifiable in bringing on this engagement seems to admit of no question. It is difficult to ascertain precisely what motive prompted them; and how far the Mexican Government is responsible for their misconduct, and its sad results are questions upon which we possess at present no reliable evidence upon which to decide.

After the skirmish Lieutenant Maus took command and had the appointed meeting, which resulted, not in the surrender of the Indians, but in the promise on the part of Geronimo that he would meet General Crook near the boundary line in about two moons. More than seventy days elapsed before Geronimo appeared at the appointed place. General Crook and he met on March 25, at El Cañon, in Mexico, 25 miles south of the line. The understanding was that he should not be accompanied by troops. The Indians were encamped on a rocky hill, in a strong and almost inaccessible position. They were fierce and independent, well armed with the best guns and ammunition, and had blankets and supplies which they had obtained in Mexico. General Crook demanded their unconditional surrender. The only propositions they would entertain were three, which General Crook states:

- (1) That they should be sent East for not exceeding two years, taking with them such of their families as they desired.
- (2) That they should all return to the reservation on the old status
- (3) To the war-path with all its attending horrors.

He was obliged to decide quickly, and accepted their surrender on the first proposal, and the whole party started, escorted by the Apache scouts under Lieutenant Maus, for Fort Bowie.

The terms of the surrender were received here March 30. The response of the President was that their imprisonment in the East for two years and their return to the reservation could not be approved. Certain instructions were given, but before General Crook received the dispatch, Geronimo and Natchez with twenty men and thirteen women left Lieutenant Maus's camp on the night of the 29th and escaped to the mountains. The remainder of the band, numbering sixty under Chihuahua, were sent to Fort Marion, Florida, where they are now held as prisoners. The children have been sent to the Indian school at Carlisle. Lieutenant Maus followed Geronimo's trail until he was satisfied that further pursuit at that time was useless. This unfortunate escape was attended by the usual sad results. The route of the Indians to the Sierra Madre Mountains in Mexico was marked by atrocities similar to those that had usually attended their course.

After these events the Lieutenant-General became satisfied that the Apache scouts could not be absolutely depended upon to fight and kill

their people, and could be trusted only to the extent of capturing or inducing them to surrender. General Crook had organized them and had not lost his confidence in their fidelity. To avoid the embarrassment of the situation he asked to be relieved; and in the change of commands following the death of General Hancock and the retirement of General Pope, General Crook was assigned to the Department of the Platte and General Miles took his place in the Department of Arizona on the 27th of April.

The instructions of the Lieutenant-General to General Miles upon assuming command were in accordance with the directions of the President, and were communicated by the Adjutant-General, as follows:

He directs that the greatest care be taken to prevent the spread of hostilities among the friendly Indians in your command, and that the most vigorous operations looking to the destruction or capture of the hostiles be ceaselessly carried on. He does not wish to embarrass you by undertaking at this distance to give specific instructions in relation to operations against the hostiles, but it is deemed advisable to suggest the necessity of making active and prominent use of the regular troops of your command.

General Miles began his campaign with great zeal and energy, and it was continued with the same vigor till it ended in September following.

Our troops at once began the active operations, and the general reported on June 7 that for thirty-six days they had followed the hostiles over 800 miles in the most mountainous region of the country, breaking up their camps, capturing horses, equipments, and supplies, and having several engagements. An attempt on the part of the hostiles to reach the agency and obtain assistance was frustrated. On the 20th of July Captain Lawton again surprised Geronimo's camp, capturing all their property, including food and horses. As the pursuit went on the Indians had but little rest, and were reduced in numbers by encounters with the troops and by desertion. Captain Lawton, whose report is published, gives a detailed account of his movements and the hardships suffered by his troops in traversing more than 1,300 miles in this difficult country, during intense heat and often destitute of water. The admirable bearing and conduct of all the troops engaged in this pursuit cannot be too highly commended. He arrived near Fronteras on the 20th of August, and learned that the hostiles had communicated to the Mexicans a desire to surrender. Some negotiations followed through Lieutenant Gatewood, which resulted in Geronimo visiting Lawton's camp and intimating his wish to make peace, and to talk with General Miles. He marched with Lawton's command to meet General Miles, and surrendered to him on September 4, with his band.

The fact of the surrender was communicated to the President and the authorities in Washington on September 7, and from the information received on that date the surrender was supposed to be unconditional. To this dispatch the President replied that all the hostiles should be very safely kept as prisoners until they could be tried for their crimes or

otherwise disposed of. The first intimation that the surrender was not unconditional reached the Department on September 9 by telegraphic advices from General Miles, through his division commander, that the Indians surrendered with the understanding that they would be sent out of the country, and in pursuance of this plan General Miles had ordered them to be taken to Fort Marion. As this order was in direct opposition to the President's orders, General Stanley was directed from the War Department to stop these Indians at San Antonio, Tex., and hold them securely until further orders.*

Nothing more specific in regard to the surrender was received at the Department until the receipt of General Howard's dispatch of September 24, in which he said that he believed at first from official reports that the surrender was unconditional, except that the troops would not kill the hostiles; but from General Miles's dispatches, and from his annual report, the conditions were plain that the lives of all the Indians should be spared, and that they should be sent to Fort Marion, where their tribe, including their families, had already been ordered.

On the 25th of September General Miles was directed by the President to report by telegraph the exact promises, if any, made to Geronimo at the time of the surrender. In his reply, General Miles states:

At the request of Captain Lawton, I joined his command. Geronimo came to me and recounted his grievances. I informed him that Captain Lawton and Lieutenant Gatewood were honorable, and that I was there to confirm what they had said to them, and that if they threw down their arms, and placed themselves entirely at our mercy, they would not be killed; but that they must surrender absolutely as prisoners of war, and rely upon the justice of the Government, or trust their future to the President of the United States. I informed them that I was removing all the Chiricahua and Warm Spring Indians from Arizona, and that they would all be removed from this country at once and for all time, and this they understood. Geronimo replied that he would obey any order I might give, and go to any place, and that he would bring in his camp, which he did. Natchez subsequently surrendered his camp in the same way. Their status is the same as that of Chief Joseph, Sitting Bull, and hundreds of others. They are strictly prisoners of war, the result of the skill and fortitude of our troops. As prisoners of war they are now entirely under the control of the President.

The account of the surrender in the report of General Miles, subsequently received, does not materially differ from the account given in the dispatch above referred to.

The terms and conditions attending this surrender were such that Geronimo and those of his band who had committed murders and acts of violence in Arizona and New Mexico could not properly be handed over to the civil authorities for punishment, as was intended by the President, and therefore, on the 19th day of October, orders were issued, by direction of the President, that Geronimo and the fourteen hostile Apache adult Indians captured with him should be sent from San Antonio, Tex., under proper guard, to Fort Pickens, Florida, there to be kept in close custody until further orders. These Indians had been guilty of the worst crimes known to the law, committed under circumstances of great atrocity, and

* All the dispatches and correspondence referring to the surrender of Geronimo were sent to the Senate February 23, 1887, and will be found in Senate Ex. Doc. No. 117, 49th Congress, 2d session.

the public safety required that they should be removed far from the scene of their depredations and guarded with the strictest vigilance. Theremainder of the band captured at the same time, consisting of eleven women, six children, and two enlisted scouts, were ordered to be sent from San Antonio to Fort Marion, Florida, and to be placed with the other Apaches under custody at that post. Geronimo and the adult members of his band arrived at Fort Pickens on October 25, and on the same date the women and children, and the two enlisted scouts reached Fort Marion.

On the 20th of October General Miles advised the Department that a small party of Apache Indians, who had separated from Geronimo and his band in August, 1885, and consisting of Mangus, two men, and eight women and children, had arrived at Fort Apache, having been captured by a detachment under Captain Cooper, Tenth Cavalry. Under orders issued October 26, Mangus and the two adults were sent from Fort Apache October 30 for confinement at Fort Pickens, Florida, at which place Mangus and one of the men arrived on the 6th of November, the other having died on the way. The eight women and children were sent to Fort Marion at the same time.

It is proper also to state the circumstances which led to the removal to Fort Marion of the Warm Spring and Chiricahua Indians on the Fort Apache Reservation.

On the 4th of July General Miles telegraphed that there were strong military reasons for allowing a delegation of the Apaches from the Fort Apache Reservation to visit Washington in regard to their removal from Arizona. Upon consultation with the President and the Secretary of the Interior it was decided that they could come, and they at once started, under charge of Captain Dorst, Fourth Cavalry. This permission was granted upon the supposition that they desired a change of abode, or could be induced to change without coercion, and the only question to be determined here would be where they should go.

Later, by telegram and letter received after the delegation was on its way, General Miles urged that the Apaches on the Fort Apache Reservation, numbering about five hundred, be sent to the Indian Territory, and that the existing laws should be so changed that this disposition of them could legally be made. This proposal was considered for many reasons entirely impracticable, and General Miles was so informed on July 15, and that military movements must proceed in view of the present arrangements in regard to these Indians. The law was against it, and the Executive would not be justified in requesting a change. To place this lawless and dangerous tribe among the peaceful Indians of that Territory would have been a breach of good faith and treaty obligations. But the same proposal was again renewed by him on the 20th as the solution of the whole difficulty, and he requested that the delegation be allowed to visit and see certain points in the Indian Territory.

In the meantime the whole matter of the removal of the tribe to the Indian Territory or to any other place voluntarily was settled by the demands and expressions of opinion made by the Indians then in Washington. Their sole desire was to remain where they were; that apparently was the object they had in view in coming, and the assurance of the authorities here that they should not be removed was very earnestly pressed. In their interviews with the President, the Secretary of War, or the Secretary of the Interior they expressed no desire or willingness to go elsewhere. No assurance was given them in any form of words that they should remain at Fort Apache. The conferences granted them were solely to hear their complaints and their requests. Information came from the officer in charge of them that they were restless and uneasy, dissatisfied with their reception and the failure to receive any assurance that they could remain at Fort Apache. In this condition of affairs the Lieutenant-General, in an indorsement to the Secretary of War dated July 30, 1886, remarked:

There are now on the reservation near Fort Apache seventy-one Chiricahua and Warm Spring adult male Indians. These are exclusive of those in this city. It is my belief that if the delegation which is now here goes back to the reservation without having received what they deem a most satisfactory promise on the part of the Government, a large number of those that are now peaceable will endeavor to join Geronimo. I therefore recommend that authority be granted me to direct General Miles to arrest all the male Indians now on the reservation near Fort Apache, and send them as prisoners to Fort Marion, Florida; that the delegation now here be sent there also, and that they be held at that point as prisoners of war until the solution of the Geronimo troubles.

This recommendation was approved so far as the removal of the Apaches on the Fort Apache Reservation was concerned, provided they could all be successfully secured by the troops; and the President directed inquiries to be made of General Miles for his opinion in regard to their forcible arrest. General Miles replied, objecting to such removal, and by letter gave his objections in detail. But, on August 20, he informed the Department that Colonel Wade, commanding at Fort Apache, was of opinion that the Indians there could be secured and moved without difficulty. Orders thereupon issued that they should be taken and sent to Fort Marion, which were carried out on the 7th of September, and they were conveyed to that fort, where they arrived on September 20, and where they are now confined.

In the matter of the Lieutenant-General's recommendation that the delegation of Apaches in Washington should also be sent to Fort Marion, it was thought that these Indians should first be returned to Arizona, which was the understanding upon which they came here. After their return they could be treated as the rest of their tribe and taken to Fort Marion. But it was of the first importance that they should not confer with their brethren on the reservation until after the latter had been secured by the troops and were in custody for removal. This delegation contained some of the most dangerous of the Chiricahuas.

With this intention on the part of the Government they started for Arizona with Captain Dorst, visiting on their way the Indian school at Carlisle. They were stopped on their journey after leaving Carlisle and sent back to Fort Leavenworth. While they were there the Indians who were to be sent from the Fort Apache Reservation to Florida were secured and started on the way. It was thought best by the Lieutenant-General that the Indians at Fort Leavenworth, who had become turbulent and excited, should be sent direct from there to Fort Marion, and orders were issued to that effect, as it was not considered practicable for any of them to meet the other band on their journey east, as had been proposed. Captain Dorst and these Indians, thirteen in number, together with three interpreters, left Fort Leavenworth on the 13th of September, and on the 20th the Department was advised of their arrival at Fort Marion.

A summarized statement of all the Indian prisoners now at Fort Marion and Fort Pickens will be found in the appendix.

It is hoped that the Apache wars and raids that have devastated Arizona and New Mexico, and the adjacent States of Mexico, for so many years, are ended by the permanent removal of the fiercest and most dangerous of the Apache tribes.

The Lieutenant-General states that many officers are becoming disabled by reason of long service on the frontier and from wounds received or disease contracted during the war of the rebellion. He is of opinion that while those who are disabled are transferred to the retired list as fast as possible it would be a great benefit to the Army if Congress would increase the list and include upon it all officers found by duly constituted boards to be permanently incapacitated for active service. In this belief I concur, and I recommend such action by Congress. I also concur in the opinion expressed by the Lieutenant General that if the Army were increased five thousand men, and two companies were added to each of the infantry regiments, the Army would be enabled to creditably perform such service as the country might demand.

The reports of the commanding officers of the Artillery School and of the Infantry and Cavalry School are very satisfactory, and show that a high standard of military education has been established, which promises to lead to the best results. The instruction of the Army in the use of the rifle or carbine has been thoroughly prosecuted during the year; the returns from each department and the results of the regular competitions exhibit a decided advance in rifle firing. As the importance of company practice in skirmish firing is better recognized, it is believed that in the near future many of the soldiers will become expert skirmishers, and the effective fire of the mass of the Army will be greatly improved.

The discipline of the Army is reported to be good, and the efficiency of the various arms of the service well maintained. It has but little opportunity for active service, and what it has is not of the most agreeable or inspiring kind. The control and pursuit of Indians, difficult

and hazardous as it often is, and developing as it does the individual character and gallantry of officers and men, is yet war on a very limited scale, and bears but slight resemblance to the great contests which follow the collision between nations. In any war with a foreign power our regular forces would be the nucleus of the great muster of volunteers, which experience has taught us must be the natural resource in times of danger, and the discipline, guidance, and command of which must fall mainly upon the officers of the Regular Army.

The efficiency, therefore, of our small force should be at the highest point, and the officers should be instructed, competent, and accomplished in all knowledge that pertains to the art of war and the duties of the soldier. Without great additional expense it should be and can be made a model army, for it has the material in its officers and men to take this position. It should be borne in mind in this connection that it has been and still is the policy of the Government to rear and train at West Point young men from all portions of the Republic to be soldiers. No expense is spared to give them the best military education possible. Only those who succeed in passing the tests of rigid examinations are selected for the public service. So severe is the ordeal through which they pass that but one in three succeeds in graduating. Nor is expense spared in providing for these young men thus educated when they take their places in the Army, for the pay of our officers is higher through all its grades than that of any other army save the Anglo-Indian army. And yet, after thus preparing and providing for them, there are no special requirements, common to all, demanding their progress and growth in the profession of arms; and no inquiry is made, or examination had, as the years go by, and they advance grade after grade, whether as individuals they are worthy of promotion, and are equal to the higher rank and larger responsibilities they are forced to assume. When a second lieutenant enters the service, whether from civil life, the ranks of the Army, or from the Military Academy at West Point, the rigid examination above alluded to is made the necessary condition for the commission. But this once passed, under present regulations, the officer can, and but too frequently does, close his books and his studies; and if he does not overwork or expose himself, he knows that, with good health and life, he is certain, under the operation of compulsory retirement, to reach the highest grade open to seniority in his arm of the service.

I assume it to be true in the Army, as elsewhere, that no man should occupy a position for which he is not fitted; and it is equally true that there should be some way in the Army, as elsewhere, through which such fitness should be ascertained. It may also be assumed that no men are so well fitted to determine the capacity or incapacity of a candidate for a place as those who have already filled the place and are familiar with its requirements and its duties. It would seem, therefore, that no objection can reasonably be urged against an examination

as a condition of promotion, the same to be conducted by officers of higher grade. This should not be a competitive examination, but simply such an examination as would demonstrate the fitness of a candidate for promotion properly to perform the duties of the grade to which he aspires. It should be a professional examination, having reference to the mental, moral, and physical fitness of the candidate. Its object is plain—the advancement and elevation of the service. Surely there can be no reasonable objection to this test on the part of those who will be subjected to it.

Examination as a means of ascertaining fitness for promotion is no longer an experiment in the Army. It has been in operation in the Medical Corps since 1834, when an act was passed requiring examination to precede admission to the corps as first lieutenant, and another examination must be passed before promotion to the rank of major. 4 Stat., 714. In 1863, examination was required as a necessary preliminary to promotion up to the grade of field officer in both the Engineer and Ordnance Corps. This still continues in force in the Engineer Corps. 12 Stat., 743. In 1874 an act was passed with regard to the Ordnance Corps, providing that no appointment or promotion therein should be made until the officer so appointed or promoted should have passed a satisfactory examination before a board of ordnance officers senior to himself. 18 Stat., 245. In all these corps the result has been so satisfactory that its propriety and necessity are no longer questioned, and no one would think of returning to the earlier system. While the nature of the examination for the line of the Army and for the staff would differ materially, there would seem to be every reason to believe that it would be equally for the advantage of each. It should, therefore, be extended to the line of the Army, and no distinction made between different arms of the same service; thereby implying that an examination was needed for one class not demanded for the other. The necessity for such examination has already been demonstrated in two of the staff corps by the failure of officers to pass their examinations, and their consequent suspension from promotion; while the rule of promotion by seniority, unqualified by any examination as to fitness, frequently allows the promotion, in the line of the Army, of men incompetent and unfit for service.

Soldiers are developed and matured rapidly on the battle-field, but in time of peace it is only by study and application, by practical experiment, by exercise in the use of weapons, and by keeping fully abreast of the world's knowledge, that the soldier can be made ready for his real work, when it comes. If he gets his promotion and his pay, and his rank and authority through lapse of time, and a perfunctory routine performance of his daily duty without offense, why should he labor and strive for a higher excellence? If he is of better and truer mettle than to be content and indifferent, and does strive and labor and earn, he gets no more than he who is idle and waits. It is the pre-

sumption of fitness and superiority, because of seniority, that makes seniority a ground of promotion; but, like all presumptions, it may be rebutted, and, if the man is shown to be unfit, the reason utterly fails.

In the Navy, examination for promotion to a higher grade in the service has been the law since 1864. This examination is intended to ascertain the officer's "mental, moral, and professional fitness to perform all his duties at sea;" and it must also appear that a board of surgeons has pronounced him "physically qualified to perform all" those duties. R. S., sec. 1493-1510. All agree that these examinations have been of great benefit to our naval service, and cannot be abandoned.

In the English army, examinations are required for promotion up to the grade of field officer. In the Austrian, an examination is required on entering the service, and another, which is very exacting, for the grade of field officer. In the German army, examinations are required.

Such investigation as we have been able to make in this department fails to disclose any service except our own where, in the line of the Army, seniority alone is the rule of promotion.

I would therefore suggest for the consideration of Congress that a general law be enacted, with provisions respecting examination similar to those which govern promotion in the Navy, with such changes and limitations, in regard to the number of examinations, and to what grades of rank and to what arms of the service they shall be extended, as may be considered necessary in applying the law to the Army.

THE MILITARY ACADEMY.

The Superintendent reports that there were present September 1, 1886, three hundred and nine cadets. The total number of officers for duty at the post, including eight professors and two surgeons, is fifty-eight.

The Superintendent strongly favors the general adoption of the competitive system in the selection of candidates for the Academy, and states that in the ten years beginning with 1873 and including 1882 two hundred and sixty-nine cadets graduated out of five hundred and sixty-nine appointed after competition, and two hundred and fifty cadets graduated out of one thousand and one appointed without previous competition. In other words, there is a difference of nearly 100 per cent. in favor of the success at the Academy of those selected by competitive examination.

An examination of the records of the Academy shows that the first six months' course is a fair test of a youth's ability to succeed. If his position in his class is doubtful then, he is very sure, sooner or later, to be found deficient. If this fact were more generally recognized, it would relieve the officers of the Academy of much useless labor, and the friends of deficient cadets of much fruitless exertion and anxiety.

The discipline has been excellent throughout the year, with but one exception. On August 28, thirty-eight cadets violated the orders in

regard to the reception of the furlough class. Six of the cadet officers were tried before a general court-martial; convicted, and sentenced to dismissal. The sentence was approved by the President, but so much thereof as related to dismissal was remitted and the officers were reduced to the ranks. The others who took a culpable part in the affair were punished under the authority vested in the Superintendent.

The report of the Board of Visitors has not yet been received at this Department.

ADJUTANT-GENERAL'S DEPARTMENT.

The annual encampments of the militia were inspected in nineteen of the States by officers of the Army, in compliance with requests from the State authorities. It is highly important that the encampments in all the States should be inspected annually by officers detailed from this Department, thus enabling the militia to receive the benefit of contact with trained and instructed soldiers. The reports of the inspecting officers show that this contact is of the greatest advantage; but, to obtain the highest efficiency, the militia should be armed and equipped like the regular Army, and therefore an increase of the appropriation provided in section 1661 of the Revised Statutes should be made, as provided in the bill (S. 222) which passed the Senate at its last session, and is now pending in the House with an amendment.

The suggestions of the Adjutant-General as to drills, uniform, the selection of officers, and the location and duration of encampments, should receive the careful consideration of State officials.

When the Adjutant-General's report was prepared there were thirty-nine officers detailed at colleges under the authority granted by section 1225 of the Revised Statutes and the amendments thereto. The total average number of male students at these colleges was 7,601, of whom 432 were under 15 years of age. The total average attendance at artillery drills was 530, and at infantry drills 3,282. The least average number of students at any college was 52, and the largest average 630. Last year only three colleges had an average attendance of over 150 male students; at twenty-two it was below 100, at twelve it was under 60, and five of the latter had an average attendance of less than 40. This year nineteen have an average attendance of over 150, at eleven it is over 100, while there are but eight with an average attendance of less than 100, of which but one is under 60—a very satisfactory increase and evidence of the growing interest manifested in military education. There is still room for improvement, however. At some of the colleges it would be gratifying if a greater interest was manifested by the faculty, and to accomplish this the officer detailed as professor of tactics and military science should be a recognized member of the faculty, with an equal vote, and military instruction should be given an equal position with other departments of study.

It is intended during the coming year to issue a new edition of the Army Regulations, revised and condensed, in a more compact form, and omitting many provisions which do not form any proper part of the regulations of the Army. The small appropriation for the military prison has caused much embarrassment and made it necessary to retain prisoners at posts, awaiting vacancies at the prison. The estimates are prepared with great care, and it is hoped the full amount asked for will be appropriated.

In the pension branch of the Adjutant-General's Office during the last year there was an increase of 12,757 calls for information from the Pension Office as compared with the previous year; this year there were 186,239 calls received, an increase of 25,238 over last year. There were 55,946 unanswered calls on hand on the 1st of October, 1886, equal to about three months' work. In other divisions of this office there has been a large increase of work growing out of recent legislation in regard to the re-muster of volunteer officers and the removal of the charge of desertion, so that the work of the office is necessarily falling behind. In consequence of this the Adjutant-General asks for an increase of twenty-five clerks for his office.

INSPECTOR-GENERAL'S DEPARTMENT.

During the year all the military posts have been inspected as required by regulations. Numerous special inspections have also been made, and the money accounts of all disbursing officers have been verified.

The Inspector-General reports that the officers of the Army are sober, orderly, capable, intelligent, and ambitious to excel; while the enlisted men are sufficiently intelligent and educated, and as well set up and instructed in drill as opportunity permits. They are orderly, subordinate, and faithful, and endure the hardships of their calling with commendable fortitude. He reports the Army as a whole "in a very healthy and gratifying condition."

The clothing is satisfactory and the food was never better than at present. He recommends that a tailor and cook be enlisted for each company, troop, battery, and band; the tailor to receive 50 cents per day extra-duty pay; that no charge should be made against enlisted men for altering their clothing, and that the cook should be paid such extra-duty pay as will make his total compensation \$30 per month. I concur in these recommendations, and attention is called to the report of the Commissary-General on this subject.

The condition of the post cemeteries is not satisfactory, and the post commanders have no funds to put and keep them in proper repair.

JUDGE-ADVOCATE-GENERAL'S DEPARTMENT.

The records show that the number of cases tried by general court-martial during last year was less by 345 than the previous year. This

decrease, the first in seven years, was accompanied by a decrease of 1,627 cases tried by regimental and garrison courts. While this is an improvement, there is still much to be done. It must be remembered, as I stated in my report of last year, that there is now no provision of law by which an enlisted man can be punished for any offense against good order and discipline, except by the action of a court-martial. In the armies of all other civilized nations, the court-martial is relieved from the trial of slight derelictions of duty, and the power of summary punishment for minor offenses is vested in commanding officers.

In the Army the desire for a change in the present method is almost universal, and such change would be attended with beneficial results both to officers and enlisted men. The report of the Acting Judge-Advocate-General indicates the present methods of punishment in the English service, and some similar provisions might with advantage be adopted in our own. He also invites attention to his report of last year, in which he recommended that the Articles of War should be revised. I am of opinion that many of the articles should be changed; and I hope to present to Congress at an early day such changes as may be considered necessary for the present needs of the service. Our present code is of English origin and we have adhered to it, although the English have made great and essential changes in its provisions.

Attention is invited to the condition of the law with regard to civilian witnesses. The result of a decision by the Attorney-General, to the effect that a court-martial has no power to punish a civilian witness for refusing to testify, leaves the court in a condition which may at times lead to an entire failure of justice. This subject was referred to in last year's report, and the suggestion is renewed that a statute should be enacted whereby an attachment against such witness for contempt would issue upon application to a United States court.

The limits of the amount of punishment allowed by our Articles of War are undoubtedly too extended. In forty-two of the fifty-four articles which practically constitute the military penal code, the punishment is left to the discretion of the court. The result of this is that similar offenses, if tried before different courts, may meet with widely different punishments.

This is a great evil, and can only be remedied by legislation limiting the extent of punishment for the different offenses under the military code.

I must also call attention to the decision of the Supreme Court, that neither a police officer nor a private citizen can arrest and detain a deserter. This decision will deprive the Army, in arresting and securing deserters, of the assistance of civilians and police officers, who have heretofore rendered valuable services in that direction. It has always been considered that arrests could be thus made for the purpose of delivering as soon as possible the offender to the military authorities, and that the rule of the common law in that regard could properly be fol-

lowed. The importance of securing such assistance is so manifest, in cases where it is not always possible to have in the hands of the party who is able to arrest the deserter a written warrant or military order, that I feel called upon to suggest that a statute be enacted applying the common-law rule to deserters, authorizing their arrest, as in cases of felony, by private citizens or police officers, for the purpose of surrendering them to the proper authorities for trial.

CLAIMS OF OFFICERS AND ENLISTED MEN FOR LOSSES OF PERSONAL PROPERTY, UNDER THE ACT OF MARCH 3, 1885.

Seventy-two claims of officers and enlisted men of the Army for losses of personal property, under the act of March 3, 1885, 23 Statutes, 350, have been filed since the subject was presented to Congress in my annual report of last year. The claims vary in amount from \$13.64 to \$6,582.29. Two of the claims presented are for value of property lost on the steamship *San Francisco* in 1853, and although both claimants received from the Government the "eight months' pay and allowances" granted by Congress in the act of March 27, 1854, 10 Statutes, 269, as an equivalent for their personal property lost on that vessel, indemnity is now demanded for the specific articles alleged to have been lost. Both claims have been rejected by the Third Auditor of the Treasury, but under a ruling of the Second Comptroller the Secretary of War must first certify the articles which are "reasonable, useful, necessary, and proper," before a claim, however unjust, can be rejected by the accounting officers.

Several claims by officers for value of horses and equipments lost in the military service have also been filed. It is contended that these fall within the purview of this act, which, it is alleged, removes the limitations of the act of January 9, 1883, 22 Statutes, 401, for the adjudication of such claims. It would appear that the Secretary of War could with propriety under the act of March 3, 1885, certify such property (horses and equipments) to be "useful, necessary, and proper for such officers * * * while in quarters, engaged in the public service in the line of duty," and it seems to be desirable, in the consideration of this subject, now understood to be before the Committee on Military Affairs of the Senate, that the scope of the act should be more clearly defined. It is suggested there would be less difficulty if the entire adjudication of the claims should be lodged with the accounting officers in conformity to the provisions of section 236 of the Revised Statutes. A bill for the repeal of the act having been introduced and referred during the last session, this Department, pending the action of Congress, has suspended action upon the claims.

QUARTERMASTER'S DEPARTMENT.

For the construction of buildings and the enlargement of such military posts as in the judgment of the Secretary of War might be neces-

sary, the sum of \$265,000 was available for the fiscal year beginning July 1, 1885, under the appropriations of March 3, 1885, and previous years. After consulting the military commanders and the Quartermaster-General this sum was distributed as follows:

For San Antonio Barracks	\$75,000
For Fort Riley	30,000
For Fort Niobrara	30,000
For Fort Niagara	20,000
For Presidio Barracks	20,000
For the new post at Atlanta	75,000
For purchase of land at Atlanta	15,000
	<hr/>
	265,000

The title to the land required for the new military post at Atlanta, Ga., having been favorably reported by the Attorney-General, the purchase money (\$15,000) has been paid, and brick buildings for the post are now being erected.

The building in New York City known as the "Old Produce Exchange" has been purchased for the amount appropriated by the act of February 2, 1886, namely, \$250,000, the Attorney-General having approved the title to the same on the 24th of March. An appropriation of \$200,000 was also made for altering and remodeling the building. Upon examination the foundations were found to be defective, and it became necessary to reconstruct the entire building. The work is rapidly progressing and the cost will not exceed the amount appropriated.

No part of the money appropriated for the purchase of Fort Brown, Texas, has been expended, the parties having failed to offer a good and valid title.

The sum of \$199,096 has been expended for repairs upon buildings, &c., and one hundred and ten new buildings have been erected at a cost of \$211,120.

Under the authority of the act of July 31, 1882, to provide additional training-schools for Indian youths, twenty-three buildings at Fort Lapwai, Idaho Territory, have been transferred to the Department of the Interior; and five useless and abandoned military reservations, or parts thereof, have also been transferred to that Department in accordance with the provisions of the act of July 5, 1884.

The buildings and grounds at Newport Barracks, Kentucky, are flooded at each high stage of the Ohio River, and higher land is needed for a military post in that vicinity. It is hoped that Congress will make the necessary provision for this purpose at the coming session. This is a two-company post, and the Quartermaster-General informs me that if \$50,000 are appropriated this year for the purpose the necessary land can be purchased and the erection of the buildings begun.

The entire cost of Army transportation during the fiscal year was as follows :

For transportation of 236,180 persons, including 200,662 transported or ferried by Government vessels.....	\$266,401 38
For transportation of 7,907 horses and mules and 169,192 tons of freight.....	975,793 93
Due for military transportation at close of fiscal year.....	337,258 27
For tolls, payment of employ��s, purchasing, maintaining, and operating vessels, purchase of draft animals, construction and repair of wharves, bridges, &c.....	1,501,125 58
	<hr/> 3,080,579 16

The Indian troubles in Arizona and New Mexico and the operations in the Oklahoma country have increased transportation expenses and compelled the strictest economy. Many wants of the service have been denied and movements of troops postponed which otherwise would have been ordered.

The expense of military transportation, not paid from the regular appropriations, includes that over the bonded Pacific railroads, amounting to \$488,761.06. This sum is credited at the Treasury on the debt of those roads due the United States. I quote the words of the Quartermaster-General on the subject of these railroads, showing that a special appropriation of \$906,314.42 is required to carry into effect the decision of the Supreme Court in the case of the Central Pacific Railroad Company *v* The United States. The subject is fully set forth in House Ex. Doc. 270, Forty-ninth Congress, first session :

The accounts of the bonded Pacific railroads are adjusted under the following statutes: Act March 3, 1873; act May 7, 1878; act March 3, 1879. Settlements for services on the unsubsidized portions of the Union Pacific Railway, including the Kansas Division (formerly the Kansas Pacific), and the Denver Pacific Railroad and Telegraph Company, the Central Branch Union Pacific Railroad, and the Sioux City and Pacific Railroad, continue to be made the same as during the past fiscal year. Settlements for services over the unsubsidized portions of the Central Pacific Railroad have heretofore been held subject to the provisions of Treasury circular letter dated January 12, 1884, under which the amounts were certified by the accounting officers and reported to the Secretary of the Treasury, subject to the disposition of Congress. No action having been taken by Congress in reference to the disposition of the amounts embraced in the settlements held in abeyance, a motion was made by the company before the accounting officers of the Treasury, by which, in effect, the revocation of the order of January 12, 1884, and the revival of the enforcement of that of June 27, 1883, was requested. The Second Comptroller, in a decision thereon, dated August 28, 1885, which was approved by the Secretary of the Treasury, and published in Treasury Circular No. 136, dated September 11, 1885, directs the revocation of Department Circular No. 83, of June 27, 1883, and circular letter of January 12, 1884, and that all compensation now due or which may hereafter become due the Central Pacific Railroad for services rendered the Government be withheld and applied, one-half upon interest account and the other half credited to the sinking fund, as required by act of May 7, 1878; also that hereafter the accounts of the company be adjusted by the accounting officers, the Secretary of the Treasury retaining the whole amount, applying the same in the manner as provided by that act. It is understood that on application

of the company the Secretary of the Treasury consented to suspend action under that part of his order directing the withholding and application of compensation due or to become due the company, upon the condition that the matter in issue be presented to the proper courts for judicial decision. In conformity thereto a petition of the Central Pacific Railroad against the United States, No. 14,711, was filed in the United States Court of Claims, November 24, 1885, to recover compensation for services performed for the United States in transportation over those portions of the road as above mentioned, in the building of which it had not been aided by the Government and therefore not embraced in the above-named act. The United States demurred on the ground that the whole of said compensation is required to be retained under the provisions of the second section of the act May 7, 1878, chapter 96 (Thurman act), 20 Stat., page 58. The decision of the court was that the provisions of the act applied only to services over the aided portions of the road, and the demurrer was overruled. An appeal was taken to the Supreme Court of the United States (October term, 1885), and decision rendered May 10, 1886, sustaining the railroad company in its construction of the second section of act of May 7, 1878, that cash payment for services over the unsubsidized roads should be made by the United States. The Secretary of the Treasury, in circular of June 4, 1886, invited attention to decision referred to, and directed that thereafter the accounts and claims of the company for such services shall be settled, adjusted, and paid in conformity to such decision, and that all Department circulars heretofore issued upon the subject are modified accordingly. On the suggestion of the honorable the Secretary of the Treasury, and by direction of the honorable the Secretary of War, the Quartermaster General, on June 7, 1886, submitted the estimates of appropriations required to execute the decision of the Supreme Court, aggregating \$906,314.42. (See House Ex. Doc. 270, Forty-ninth Congress, first session.) The appropriation was, however, refused by Congress. (See House Report No. 3109, Forty-ninth Congress, first session.)

In view of the circumstances here reported, and the fact that the estimates upon which the regular appropriations of the Quartermaster's Department entitled "Transportation of the Army" were based carefully excluded any provision for payment of money to the bonded Pacific railroads, for the reason that the laws as interpreted by the accounting officers of the Treasury and the Department of Justice, at the time of the preparation of the estimates, prohibited any payment to these companies, it is thought that the Army transportation appropriation should not be used in payment of any accounts of these companies, but that a special appropriation from Congress for the purpose should be secured. As a matter of fact, the appropriation for transportation of the Army will be hardly sufficient to meet the usual demands of the service, as contemplated in the preparation of the estimates of the amount needed for the purpose.

The average cost of cavalry and artillery horses during the year was \$141.24; of draft horses, \$205.85, and of mules, \$154.99 per head. At the close of the fiscal year there were on hand 8,609 cavalry and artillery horses, 454 team horses, 5,493 mules, and 6 oxen. The veterinary supplies purchased this year cost \$2,266.95, a saving of \$11,065.33 as compared with last year. This is due to the revision of the supply table and the purchase of the supplies from the Medical Department.

There were 1,552 miscellaneous claims and accounts acted on during the year, amounting to \$532,160.85, leaving on hand July 1, 1886, 10,669 miscellaneous claims and 249 accounts, amounting to the sum of \$8,516,715.59. The agents of the Quartermaster's Department have investigated and reported upon 2,906 claims of loyal citizens for quartermaster's stores, filed under the act of July 4, 1864. The Quartermaster-

General has taken final action upon 3,767 of these claims during the year, and on July 1, 1886, there were 4,983 awaiting action.

The following table exhibits the entire number and amount of claims filed under the act :

Number of claims presented to June 30, 1886.....	57,821
Number of claims allowed.....	18,329
Number of claims disallowed.....	34,509
	<hr/> 52,838
Number on hand July 1, 1886.....	4,983
	<hr/>
Amount of 57,821 claims presented.....	\$39,611,886 99
Amount of 52,838 claims acted upon.....	35,195,309 04
	<hr/>
Claims on hand (4,983).....	4,616,577 95

The clothing and equipage for the Army are obtained by contract or by manufacture at the quartermaster's depots at Philadelphia, Jeffersonville, and San Francisco. The boots and shoes are manufactured at the military prison at Fort Leavenworth, Kansas. These supplies have given general satisfaction.

In the eighty-two national cemeteries there are 323,947 interments.

Contracts are about to be made for the construction of the roads authorized by Congress at its last session to the Chalmette, Knoxville, and Natchez national cemeteries. When these are completed there will be nine roads constructed under special authority of law, for the maintenance of which there is no appropriation. Some are almost impassable for want of repairs. The road to the Vicksburg national cemetery could have been kept in good order for a few hundred dollars expended as required; it will now cost \$10,000 to restore it to good condition. An estimate has been submitted for the maintenance and repair of these roads.

SUBSISTENCE DEPARTMENT.

The report of the Commissary-General of Subsistence is very satisfactory and contains the usual financial exhibit of the operations of the Subsistence Bureau for the fiscal year 1886, and other statistical matter relating to the conduct of its affairs.

The Army ration is ample in quantity, excellent in quality, and the utensils for cooking it are all provided; but it is not cooked as it should be, for want of proper skill. This is one of the great wants of the service, as reported both by the Commissary-General and the Surgeon-General, and nothing would add so much to the comfort and health of the troops as a corps of good cooks; accordingly I unite with the Commissary-General in recommending that legislative authority be granted for the enlistment of one cook for each troop, battery, and company, and each general depot of recruits, and of a baker for each garrisoned post.

MEDICAL DEPARTMENT.

The Acting Surgeon-General gives a financial statement of operations of the Medical Department for the fiscal year ending June 30, 1886.

He recommends that existing laws relative to the issue of trusses be so amended that every person who has been or who may hereafter be ruptured in the line of duty in the military or naval service of the United States shall be entitled to a truss. The money value of medical and hospital supplies actually issued during the fiscal year was \$168,119.06; the cost of supplies for the current year will probably exceed that amount. The limit of the amount of appropriation to be expended for pay of employes of the Medical Department should be increased to \$46,000, rendered necessary by needed increase of force in purveying depots; and he also recommends, as for the best interests of the service and in view of economy, that Congress be requested to grant authority to make purchases of medical and hospital supplies costing less than \$500, after the usual advertisements, but without entering into the formal written contract now required, as in many cases the expenses entailed thereby are equal to the cost of the article.

The number of admissions to sick-report during the past year was 32,990, or 3,839 less than for the preceding year, while the ratio of cases to mean strength was considerably lower, being as 1,367 is to 1,532. There were during the year 182 deaths from all causes, 115 from disease, 67 from injuries, or a ratio per 1,000 of mean strength of 7.5, against a ratio of 10.9 for previous year. It is a matter of congratulation that not only the admission-rate to hospital but also the death-rate has fallen to a lower point than at any time within the history of the Medical Department. There were 757 discharges for disability during the year, a decrease as compared with the previous year.

The past year has been one of exceptional freedom from disease and epidemic, though one of unusual activity and severity for the troops engaged in military operations on the southwest frontier. The principal causes of disability in the past year have been injuries, diarrheal diseases, diseases of respiratory system, malarial diseases, rheumatism, venereal affections, and the acute infectious diseases. Enteric or typhoid fever, which for several years has had an epidemic tendency, shows a decided decrease, 76 cases being reported against 156 in preceding year. Venereal diseases also show a decrease: 55 per 1,000 against 65 per 1,000 for preceding year. Among the acute infectious diseases, are reported chicken-pox, dengue, diphtheria, measles, mumps, scarlet fever, and one case of typhus fever.

The rate of mortality, as shown in the different arms of the service, place the cavalry first, infantry second, and artillery third. But little difference is shown in the death-rates for commissioned officers and enlisted men, the rates for the former being 7 and for the latter 7.1 per

1,000 of mean strength. The age of greatest mortality was for commissioned officers, the period between 50 and 56, and for enlisted men between 56 and 60. Among native-born white troops, 86 deaths occurred, or 6.4 per 1,000 of strength; among foreign born, 82 deaths, or 7.9 per 1,000; among colored troops, 14 deaths, or 5.9 per 1,000.

There were returned during the year 6,016 cases of injuries; of which 3,393 were not of a serious nature, but contributed materially to the non-effectiveness of the troops. Deaths from wounds or other violent causes numbered 72, being 2.95 per 1,000 of strength; the rate for the previous year was 3.45 per 1,000. The casualties occurring during the campaign against the hostile Apaches embrace 1 officer, 4 enlisted men, and 2 Indian scouts killed; 1 officer, 4 enlisted men, and 3 Indian scouts wounded; a total of 7 killed and 8 wounded. Assistant Surgeon T. J. C. Maddox, U. S. Army, was killed in the affair at Little Dry Creek, New Mexico, December 19, 1885. In addition to the casualties of battle 3 men were instantly killed at the rifle range, 3 were discharged on account of wounds received during rifle practice, and 12 less severely wounded were returned to duty. Nineteen cases of injury are also reported from explosion of cartridges, all of which were returned to duty. Two cases of homicide, 9 of suicide, and 8 of accidental shooting are also reported. During the year 184 surgical operations are reported, 85 consequent upon injuries received, and 90 for relief of surgical diseases; of these operations, 179 resulted in recovery and 5 proved fatal.

Very complete reports of the examination of recruits for the Army have been received from 129 military stations and 25 recruiting rendezvous and depots. These reports show examinations of 16,805 applicants for enlistment; of this number, 72,44 men were accepted. By far the most frequent causes of non-acceptance were imperfect mental and physical development and general unfitness.

The total number of official calls upon this office during the year for information in pension applications was 55,111, being 9,344 more than similar applications during the previous year. Replies have been furnished to the proper authorities in 49,879 cases, of which 7,473 were to the Commissioner of Pensions, 40,043 to the Adjutant-General of the Army; 8,581 remain to be searched and reported on. During the year 27,449 folios of worn and dilapidated hospital registers of sick and wounded were copied and preserved from destruction.

The total accessions to the museum collection during the past year were 1,355 specimens, illustrating medicine, surgery, anatomy, physiology, and microscopy. It is very desirable that a catalogue of the museum should now be published; such a catalogue, with proper illustrations, will make three large volumes and will be of great benefit to the medical profession. It is recommended that authority be granted by Congress for printing this work. There have been added to the library of this office during the year 4,513 books and 10,708 pamphlets; making a total collection of 76,732 books and 106,631 pamphlets.

Volume VII of the Index Catalogue has been published and is in course of distribution; manuscript for the eighth volume is in course of preparation, and the first part is now going to press. The manuscript of the third medical (and final) volume of the Medical and Surgical History of the War is now in the hands of the printer, and the volume will probably be issued in the coming spring.

Increased attention to the hygienic needs of the soldier and to the subject of sanitation at all military posts, with gratifying results, is shown in the monthly sanitary reports received at this office, and to the diminished rates of sickness and mortality for the year. The cheerful and appreciative co-operation of commanding officers in this matter is also especially gratifying. It is urged that means be devised for the proper instruction of army cooks, as an essential to the physical and moral well-being of the troops. Five ice machines have been ordered for posts in the intensely hot regions of Arizona and Texas; it is hoped and believed that they will secure to the garrisons so situated a much-needed comfort and to the sick an indispensable necessity.

There are now four medical officers who have been recommended for retirement, and at least six others who can do no more active service. The interests of the Department demand that their places should be filled by young and active men, and it is hoped Congress may be induced to afford relief by special or general legislation.

Attention is invited to the failure of Congress to appropriate money for the payment of extra-duty pay to enlisted men detailed as cooks and nurses in post hospitals. As this service is absolutely necessary for the welfare of the sick of the Army, it is hoped that Congress will be pleased to make provision for the payment of such services as may be rendered gratuitously during the current year.

The necessity for the organization of a hospital corps, by the enlistment of able-bodied and intelligent men, who shall be thoroughly trained as cooks, nurses, attendants, and litter and stretcher bearers, is becoming yearly more imperative, and the detail of a board of competent medical officers to prepare a plan of organization for such a corps, suitable to the condition of our Army, with a view to Congressional action, is strongly recommended.

The bill to increase the efficiency of hospital stewards of the Army, in accordance with the recommendation made in the last annual report, has passed the Senate and has been favorably reported from the Military Committee of the House of Representatives. It is hoped that this bill, affecting this valuable class of non-commissioned staff officers, will become a law at an early date.

The contract entered into with Providence Hospital for the support and treatment of transient paupers, pursuant to the act of March 3, 1885, has been satisfactorily fulfilled by that institution.

Seven candidates for the position of assistant surgeon, United States

Army, have passed successfully an examination before the Army Medical Examining Board. Their names have been submitted to the Secretary of War for appointment as assistant surgeons, and five have thus far received such appointments, leaving two to be appointed as vacancies may occur.

ARMY MEDICAL MUSEUM AND LIBRARY.

By act of Congress approved March 2, 1885, the sum of \$200,000 was appropriated for the construction of "a brick and metal fire-proof building to be used for the safe-keeping of the records, library, and museum of the Surgeon-General's Office of the United States Army."

The work on this building has proceeded steadily under contract. The walls of the main building and annex have reached the top of the main cornice, and one-half of the roof trusses of the west wing have been put in place. It is hoped that the roofs of the buildings will be completed and the heating apparatus put in, so that the interior may be plastered during the coming winter.

ARMY AND NAVY HOSPITAL, HOT SPRINGS, ARK.

Since the date of the last annual report, work upon the Army and Navy general hospital at Hot Springs, Ark., has been much delayed by want of funds to complete the buildings and place them in condition for occupation. By the act of Congress making appropriation to supply deficiencies for the fiscal year ending June 30, 1886, and approved August 4, 1886, the necessary funds were provided, and the hospital will be completed and in condition to receive patients about the 1st of December. As required by the act of June 30, 1882, the President has promulgated rules and regulations for the government of the hospital.

PAY DEPARTMENT.

The disbursements of the Pay Department during the fiscal year ending June 30, 1886, amounted to \$13,444,733.15, without loss resulting to the Government.

There is little of general interest to notice in this report. The enlisted men are manifesting a greater interest in the deposit system authorized by the act of May 15, 1872, the sum of \$469,031.55 having been deposited the last fiscal year, an increase of \$41,413.59 over the amount of the previous year. The sum which the soldier who serves through several enlistments may be able to deposit is in many cases very large; in several instances soldiers have amounts exceeding \$3,000 to their credit. Every new deposit affords a guarantee for the good conduct of a soldier, and is a practical security against his desertion, for if he deserts he forfeits his deposit.

ENGINEER BUREAU.

During the past year work in connection with fortifications has been restricted to that necessary for their preservation and repair. This whole subject has been elaborately and carefully treated in the report of the Board on Fortifications or other Defenses, submitted at the last session, to which I again invite the special attention of Congress. The utterly defenseless condition of our sea-coast and lake frontier is now well understood by every civilized nation in the world, and immediate action should be taken to prevent the disastrous and humiliating results that might follow a declaration of war with the most insignificant of foreign powers possessing guns and ships of modern construction.

What is needed for the defense of our sea-coast may be briefly stated. The principal cities named in the report of the Board on Fortifications should be fortified, and work on those most important should be begun at once, viz, New York, San Francisco, Boston, and Washington. The defenses required must be erected and prepared to resist attack from the water. For the great ports of Europe such defenses must also be arranged to resist the attack of armies by land. But no considerable army will, in all human probability, cross the sea and attempt the invasion of our territory at these populous points. War vessels would be sufficient for such attacks; and, besides, armies can be rapidly raised and armed by us for defense against troops. We have, therefore, a single problem to solve in defending our cities: how best to resist and silence the armored ships and the steel guns and mortars of modern construction. It can only be accomplished by guns of equal force to those which any enemy can bring against us, and by torpedoes or submarine mines laid in the navigable channels, both so guarded and protected that they can do efficient service when required. We have no gun now which can stop the progress of or do any material injury to a well-armored ship. The manufacture of a gun is a work of time, and of a long time, and cannot be extemporized when wanted. Torpedoes may be more quickly created, but still time and money are needed for their construction. It has been said by a well-informed writer on the subject that it is a matter of doubt if we have on hand enough cables and cases to control with torpedoes the channels past Sandy Hook alone.

The work has been thoroughly considered and laid out, and the Engineer and Ordnance Corps of the Army are ready to begin, and only wait for the appropriations from Congress.

While there have been some differences of opinion in regard to the best methods of preparing armor-plate for fortifications, requiring still further study and experiment, there is no reason why this should delay the beginning of the important work of fortifying our great harbors. The preparation of sites and masonry foundations for batteries, casemates, and turrets, and also the construction of submarine mines, and of

earthen batteries for rifled mortars, are works equally necessary as the work of procuring the best armor, and can be constructed before the armor-plate is required.

Owing to the failure of appropriations for the present fiscal year, either for fortifications or torpedoes, experiments on torpedoes have been suspended, which had gradually developed a system of fixed mines, which, if appropriations are renewed, promises to produce the best results. In the present condition of the sea-coast defenses, a detailed description of which is contained in the report of the Chief of Engineers, our main reliance in case of war would be on fixed mines. The number on hand is insignificant, and the preparations for operating them have yet to be made.

I would also invite attention to the necessity for keeping in the service at all times a sufficient force of engineer soldiers, well instructed in their duties as a torpedo corps and able to place torpedoes in position before an enemy's fleet could arrive in front of one of our important harbors. The practical instruction of our engineer troops in the details of this special service has to a great extent, through want of appropriations, been suspended and their efficiency thereby much impaired.

I also desire to call attention to the needs of the Engineer School of Application at Willets Point. This establishment, where the torpedo experiments are carried on, is doing excellent work in preparing lieutenants of engineers and of artillery as experts in torpedo warfare. It is of the first importance that appropriations should be made as requested for the school, for water sewage, additional quarters for officers, and the other items mentioned in the estimates already submitted to Congress.

The funds with which the works of river and harbor improvement were prosecuted during the fiscal year ending June 30, 1886, were, owing to the failure of appropriations during the second session of the Forty-eighth Congress, derived mainly from such balances as remained on hand from the appropriations of the act of July 5, 1884, and in many instances, these being only sufficient for the care of the public property appertaining to the works, operations were necessarily suspended. The report of the Chief of Engineers sets forth the condition of each improvement, the extent of the work performed during the last fiscal year, the amount of money expended, and, in compliance with the provisions of the river and harbor act of March 2, 1867, estimates of the amount that can be profitably expended during the fiscal year ending June 30, 1888, with the probable cost of completion.

The examination and surveys at places required and provided for in the river and harbor act of August 5, 1886, have been assigned to the officers in charge of the several river and harbor districts. Reports thereon will be transmitted to Congress from time to time during the ensuing session.

A statement is given in the report of the Chief of Engineers of the action taken during the year upon such plans and locations as were submitted, by parties interested, of bridges proposed to be built over navigable waters under authority of Congress, subject to the approval of the Secretary of War. Examinations were also made, whenever requested by committees of Congress, of proposed bills authorizing the construction of bridges, upon which the views of the War Department were desired; of bills so examined during the last session of Congress fifteen originated in the Senate and forty-three in the House of Representatives. A statement is also given of the work accomplished in the removal of wrecks obstructing or endangering navigation, general provision for which is made in the river and harbor act of June 14, 1880, enlarged by provisions of the river and harbor act of August 2, 1882.

In consequence of the provisions of section 2 of the river and harbor act of July 5, 1884, which require the Secretary of War to report to Congress whether any bridges, causeways, or structures erected or being erected interfere with free and safe navigation, and, if so, to report the best mode of altering or constructing them, the Chief of Engineers was instructed to submit reports covering all facts necessary to enable a compliance with the terms of the act, and a communication enumerating all instances reported to date, of interference with free and safe navigation was transmitted to the Senate December 18, 1885.

The small appropriation asked for the next fiscal year for surveys required for military purposes and for the publication of maps for the use of the War Department is earnestly recommended.

IMPROVEMENT OF SOUTH PASS, MISSISSIPPI RIVER.

In the last annual report of the Department the record of this work was brought down to September 9, 1885. The channel has been maintained as required by law for a full year within the period from September 10, 1885, to September 26, 1886, both dates inclusive, for which Mr. Eads has been paid \$100,000, and also \$50,000 for one year's interest on the \$1,000,000 retained, making the total expenditures to September 26, 1886, inclusive, \$5,300,000. During seventeen days of this time there was not a legal maintenance of the channel, for which period no payment has been made.

The funds appropriated by the act of July 5, 1884, for testing the depth of water and width of channel were exhausted at the end of November, 1885, and the employes voluntarily continued work for seven months without pay, relieving the Government from any obligation unless Congress should appropriate funds for the purpose. As the law requires the examinations and surveys, in order that payments may be made to Mr. Eads for the legal maintenance of the channel, it is recommended that the appropriation for the expenses thereof be made as an independent measure.

WATER SUPPLY OF WASHINGTON, D. C.

The work for increasing the water supply of Washington, D. C., has been continued. The dam across the Potomac River at Great Falls is nearly completed, and the whole work will be finished during the present season. The tunnel has been excavated for a distance of 5,040 feet, making the whole length of excavation 18,538 feet, and leaving unfinished 2,150 feet at the close of the fiscal year. The sum provided in the general deficiency appropriation for continuing this work is \$395,000. The ultimate cost of completion, however, will probably exceed this amount, in consequence of the suspension of the work, which continued for a period of six months, the available funds having been exhausted February 1, 1886. Work on the reservoir was continued during the year, and it is believed that the amount appropriated in the general deficiency act, viz, \$160,000, will be sufficient to complete it in all its essential features.

RECLAMATION OF THE POTOMAC FLATS.

The project for the improvement of the Potomac River in the vicinity of Washington was adopted by act of Congress of August 2, 1882, and has for its object the improvement of navigation, the establishment of harbor lines, and the elevation of the flats in front of the city. The expenditures for the improvement have thus far amounted to \$739,574.

The work has been retarded by the great number of freshets occurring during the year, and by the failure to make an appropriation in 1885. It is of the utmost importance that large appropriations should be made in the early stages of a work of this character and magnitude. It is now in such a state of progress that it is liable to great damage from freshets, and it should be pushed rapidly to a point nearer completion. The sum of \$700,000 could be profitably expended during the fiscal year ending June 30, 1888, in continuing the work in accordance with the project.

BRIDGES OVER NAVIGABLE WATERS.

In view of the urgent necessity for legislation to prevent the obstruction of the navigable waters of the United States, I quote the remarks upon the subject in my last annual report:

Under the act of Congress of July 5, 1884, the city of Saint Paul was authorized to construct bridges across the Mississippi River at that city, upon plans subject to the approval of the Secretary of War. The plans of a bridge designed to be erected by the city were submitted to me for approval in March last, according to the provisions of the act. After consultation with the Chief of Engineers I was unable to approve them; but at the request of the authorities of Saint Paul I submitted the question to the Attorney-General, and in his opinion the plans were not in conformity to the provisions of the act. During this investigation it appeared that directly below the main span of the proposed city bridge, which, in accordance with the act, was 300 feet in width, there had been erected in the middle of the navigable portion of the

stream, by the Minnesota and Northwestern Railroad Company, a large pier 40 feet in width, which was to form a part of a bridge across the river about to be built by that company. This fact was accordingly reported to the Attorney-General, who replied that "in the existing state of the law the facts of the present case afford no ground for a judicial proceeding on behalf of the United States against the railroad company, and that until Congress makes some adequate provision upon the subject the officers of the United States can in this case take no action to enforce the rights of the Government and give effect to the duty resting upon it to protect the navigation of the Mississippi River." This railroad bridge above referred to has not been officially reported upon by the Engineer Department, because, not having been authorized by act of Congress, it is not under the jurisdiction of this Department; but it is believed to be an obstruction to navigation. The railroad company claims authority to erect it under the act of the Territorial legislature of Minnesota of 1854, and asserts that the authority to build bridges across the Mississippi River and its tributaries within the State of Minnesota under the authority of the laws of that State has been exercised in several cases.

The Attorney-General, in the decision above referred to, remarks: "As the Mississippi River above, at, and for some distance below the city of Saint Paul is wholly within the State of Minnesota, the principle enunciated by the Supreme Court of the United States in *Wilson v. The Blackbird Creek Marsh Company* (2 Pet., 250); *Gilman v. Philadelphia*, (3 Wall., 713); *Pound v. Turk* (95 U. S., 459); and *Escanaba Company v. Chicago* (107 U. S., 678) applies to this case, namely, that until Congress acts and by appropriate legislation assumes control of the subject, the power of a State over bridges across navigable streams within its limits is plenary."

The only general power which the Secretary of War has to act in the matter of bridges which obstruct navigation is found in section 8 of the river and harbor act of July 5, 1884. This law does not prevent the erection of bridges which obstruct navigation, but prescribes that the Secretary of War shall require such aids to the passage of the draw-openings or raft-spans of such bridges as he may deem necessary.

This recital discloses the fact that a private corporation, acting under the authority of a Territorial act, is obstructing the main navigable channel of the Mississippi within a few hundred feet of the spot where Congress, in authorizing the city of Saint Paul to build a bridge, provided there should be a span over the channel leaving a clear water-way of not less than 300 feet in width. It has been thought proper to call the attention of Congress to this question.

This pier is an obstruction to navigation, and would seem to fall within that class of cases which it is the duty of the Secretary of War to report to Congress under the last paragraph of section 4 of the river and harbor act of August 5, 1886.

ORDNANCE DEPARTMENT.

The national armory at Springfield, Mass., during the last fiscal year manufactured 39,527 rifles, carbines, and shot-guns, in addition to the repair of arms, the manufacture of swords, sabers, and other miscellaneous articles. The magazine guns issued to the Army for trial last year were thoroughly tested in competition with each other and with our present arm, the Springfield rifle. The result was declared to be strongly in favor of the Springfield, in preference to any of the others. The remarks of the Chief of Ordnance on the subject are very much to the point:

"After a careful examination of these reports I am satisfied that neither of these magazine guns should be adopted and substituted for the Springfield rifle as the arm of the

service. I have been and am an advocate for a magazine gun, but it would seem the part of wisdom to postpone for the present any further efforts towards the adoption of a suitable magazine arm for the service. The Springfield rifle gives such general satisfaction to the Army that we can safely wait a reasonable time for the further developments of magazine systems."

The new model rod-bayonet Springfield rifle, with improved sight, is now upon trial in the hands of the troops. Our metallic ammunition, already very excellent, has, during the past year, been materially improved.

The demands upon the Ordnance Bureau for materials for rifle practice have very much increased, showing a great interest throughout the Army in this important branch of a soldier's education. All demands have been promptly and liberally met, so that the rifle ranges at posts throughout the country are now better equipped than ever before. The facilities offered to our soldiers in this respect are; it is believed, greater than those enjoyed by other armies.

Captain Lyle of the Ordnance was sent last spring, under orders of the War Department, to Spezia to witness the trial of Gruson's chilled-iron armor. The trial demonstrated the ability of this armor to successfully withstand the impact of forged-steel projectiles fired from the heaviest guns.

It is hoped that Congress will take action, during its next session, to place the Army on an equal footing with the Navy in the matter of the manufacture of guns. The Gun Foundry Board earnestly recommended that the Government establish two gun factories, one for the Army and the other for the Navy. The Board on Fortifications or other Defenses indorsed this recommendation, and Congress gave partial effect to it by legislation which has enabled the Navy Department to establish a factory at the Washington navy-yard. The Senate passed a bill at the last session containing, among other valuable provisions, the establishment of an Army gun factory at Frankford Arsenal. This bill, however, did not obtain the concurrence of the House of Representatives, and is still in conference. It is hoped that it will be passed at the coming session.

With the exception of work on existing contracts, continued from last year, the operations of this Department with regard to the armament of fortifications have ceased, owing to the failure of the fortifications appropriation bill to become a law. This has caused serious injury, not alone from the stoppage of work but also from the loss of skilled workmen, who have been discharged for lack of funds to pay their wages. It affects the Government, as well as the Army, for the economical, as well as the efficient, performance of technical work, forbids its being done in an intermittent manner. There will be great difficulty in procuring good men upon a resumption of work, for those formerly employed will have sought employment elsewhere.

Owing to the failure of the bill mentioned to become a law, the completion and test of the various experimental guns, the development of

powders and explosives, the alteration of carriages for existing guns, and nearly all the work of the ordnance proving-ground have been suspended, and much valuable skilled labor for a long time employed at that station has been lost to the Government. During the past year experiments were continued with the 12-inch cast-iron B. L. rifle, until 137 rounds were fired. It was then found that the erosion of the bore was so great that the gun was thought to be unsafe. The result of the firing was to show that the power of this gun is about equal to that of the 10½-inch steel rifle, which is 21.5 tons less in weight.

Experiments upon rifled mortars to determine the comparative merits of the breech and muzzle-loading systems still continue.

It is gratifying to state that the results of trials and tests of powder and of steel for gun making, furnished from the Du Pont, Midvale, and Cambria Works continue to fully answer our expectations, so that there is no reasonable ground to doubt that these two important branches of military industry, upon which reliance must be had in case of war, can with due encouragement from Congress be brought to the highest standard maintained abroad.

I deem it my duty to invite attention to the present state of our field artillery. The Chief of Ordnance reports 500 serviceable 3-inch wrought-iron M. L. guns on hand, in addition to the new steel 3.2-inch guns, of which 25 will be completed by the end of November. There are practically no carriages for any of these guns. The wooden carriages made years ago for the wrought-iron guns are no longer serviceable, and if serviceable would not answer for the new steel guns. The metal carriages designed for the latter will serve equally well for the iron guns, and can be replaced by the steel carriages as fast as supplied. At present the needs of our field artillery are most pressing.

Experiments with the Powlett pneumatic gun-carriage, and with steel siege guns, and experiments to develop an effective system of defense for torpedo lines, have been carried on during the year, and still continue.

The law makes it the duty of the Secretaries of War, Navy, and Interior to cause and require every contract made by them severally on behalf of the Government, or by their officers under them appointed to make such contracts, to be reduced to writing and signed by the contracting parties, with their names at the end thereof.

It is to be observed that this applies to every contract, without regard to its amount or the time of delivery of the articles to be bought. There are numerous small contracts for which proposals must therefore be invited by advertisement, many of them for amounts less than \$500, and where immediate delivery is required. The reduction of such contracts to writing not only delays the public business, but is a matter of additional expense to the Government. Each contract is made in quintuplicate; one copy is retained by the officer, the second by the contractor, the third is sent to the chief of the proper bureau of the War

Department, the fourth goes to the proper accounting officer, and the fifth is filed in the returns office of the Department of the Interior, with all the copies and papers in relation to such contracts attached together by a ribbon and seal, and marked by numbers in regular order according to the number of papers composing the whole return, to which is affixed the oath of the officer making the contract as required, secs. 3709, 3744, 3745, Rev. Stat. This involves a great deal of clerical labor, and the public interest does not require these elaborate formalities in making purchases of less than five hundred dollars.

In accordance with the requests of the Chief of Ordnance and the Acting Surgeon-General, I recommend that section 3709, Revised Statutes, be amended by inserting after the word "services" in the first line, the words "in excess of five hundred dollars," as follows:

SEC. 3709. All purchases and contracts for supplies or services in excess of five hundred dollars, in any of the Departments of the Government, except for personal services, shall be made by advertising a sufficient time previously for proposals respecting the same, when the public exigencies do not require the immediate delivery of the articles, or performance of the service. When immediate delivery or performance is required by the public exigency, the articles or service required may be procured by open purchase or contract, at the places and in the manner in which such articles are usually bought and sold or such services engaged between individuals.

The law now allows purchases in open market to the amount of five hundred dollars to be made by the Interior Department. Stat., 1885-'86, p. 46.

THE CHIEF SIGNAL OFFICER.

The course of instruction at Fort Myer of officers and enlisted men was continued during the year, providing for the theoretical and practical information in the duties required of the Signal Corps in time of war, and also for the meteorological service.

The importance of this branch of the military service was shown during the recent Indian campaign in Arizona, where three small detachments sent to General Miles rendered valuable service.

The weather forecasts have been regularly issued during the year, and the increasing demand for them may be taken as evidence of their value.

The progress made in the system of cold-wave warnings has been highly satisfactory, and the Chief Signal Officer is convinced that property to the value of many millions of dollars has been saved through its agency. He recommends "that the sum of \$5,000 be expended for the extension of the system, to be added to the estimates for the fiscal year ending June 30, 1887."

The number of stations in operation June 30, 1886, was 452. Daily telegraphic reports are received throughout the year from 160 stations; from April 1 to October 31, from 135 cotton-region stations, and from 69 special river stations in times of flood, and the remainder report monthly by mail. In addition, reports are received throughout the year from 24

Canadian stations by the co-operation of the Canadian meteorologic service, from 288 volunteer observers and Army surgeons at military posts, from 294 foreign stations, and from 616 naval and merchant vessels.

The Chief Signal Officer states that the value of the Weather Bureau to the country would be largely increased by further extensions of the facilities for distributing the weather forecasts, and by increasing the number of stations, and for that purpose he recommends "that an addition of \$10,000 be made to the estimates for the fiscal year ending June 30, 1888."

The work of watching, recording, and giving timely warning, by telegraph, of the rise and fall of rivers is an important feature of the service, and by its agency much valuable property has been saved. During the year the system of reports has been reorganized and extended. These reports are not only valuable in time of flood, but they also serve a valuable purpose in time of low water, enabling shippers to direct the movement of their vessels at the different points along the river course.

The system of reports for the benefit of the cotton interests has been continued under many disadvantages, owing to the small appropriation made for this work. As this service is of great importance to those specially interested, a sufficient appropriation should be made for increased pay of observers and for prompt telegraphic work.

There are 2,361 miles of military telegraph lines now operated by the Signal Service. The sea-coast line, which extends along the Atlantic from the neighborhood of Boston to the Cape Fear River, not only secures meteorological reports from exposed points, but has served to communicate messages whereby prompt assistance has been rendered to vessels in distress, and many lives and valuable cargoes have been saved. This line should be extended along the entire Atlantic coast, thus adding to the efficiency of the Signal Service and assisting the Life-Saving Service in the performance of its humane work.

The laying of the cable, authorized by Congress, connecting Nantucket with the mainland has been completed, and telegraphic communication with the island is now established.

The system of special frost warnings for the benefit of the tobacco, cranberry, sugar, raisin, and fruit-growing districts has continued in operation as organized in 1882.

The organization of State weather services, co-operating with the Signal Service, has met with encouragement, and the evident value of such organizations in affording means for the rapid distribution of the weather forecasts, without expense to the General Government, has led to the extension of the system during the year in States where it had not previously been in operation.

The Chief Signal Officer is of opinion that meteorological observations are of the first importance at points where it is impossible from the expense involved to maintain regular stations, the cost of which would

amount to \$1,000 and more per annum. These observations can be obtained if the necessary instruments are furnished. These would not cost more than \$250 at each station, and the importance of the service is of much more value than the entire cost of the instruments. There is no provision of law under which public property can be issued for this work, but it has been the custom since the organization of the Signal Service to loan such meteorological instruments as are necessary to secure observations for the Signal Service from voluntary, that is, unpaid, observers. This plan I consider, under existing laws, of doubtful legality and I would, therefore, recommend that Congress authorize the loan of instruments in such cases, the Department taking a bond to secure their safe return.

As bearing upon this subject I would invite attention to the following extract from report No. 2740 of the House of Representatives, Forty-ninth Congress, first session, page 25 :

The Commission believe that a considerable expenditure could be saved, both in the number of employes as observers, as well as the expense of stations, by rearranging both, so as to utilize fully State organizations of the weather service, and also the universities and colleges of the country. These would furnish the necessary reports in many cases with absolute regularity if allowed a small sum in addition to the cost of telegraphing and the instruments necessary to take the observations ; but this is a matter of administration that should be supervised by the Chief Signal Officer under the direction of the Secretary of War, and can easily be done without further legislation.

Signal Service agencies for the benefit of commerce and the marine interests have been maintained during the year at New York City, Boston, and Philadelphia.

Detailed reports of special work under the scientific assistants accompany the Chief Signal Officer's report.

The service continues its co-operation with boards of trade and other commercial organizations in the large cities, and has received from them valuable assistance in making the Signal Service more valuable throughout the country.

In connection with the operations of the Lady Franklin Bay expedition, the Chief Signal Officer suggests that Congress should recognize the successful work performed by Lieutenant Greely and his party, by providing promotions of the survivors and support for the families of those who lost their lives while serving with this expedition.

The Chief Signal Officer invites attention to the importance of bringing the work of his office into a single convenient building, and recommends that an appropriation of \$108,000 be made for the purchase of the building on the corner of Twenty-fourth and M streets northwest, owned by Mr. Ferguson, and also that an appropriation of \$42,000 be made for the erection of storehouses on the grounds attached, to accommodate the accumulated original records of the Service. The buildings now occupied are scattered and liable to destruction by fire ; the annual rental is \$7,500. The interest on the sum asked, viz, \$150,000, at

3 per cent, is \$4,500, a saving on the rent now paid of \$3,000, to which should be added the amount that can be saved in the hire of porters and messengers when the offices are brought into one building—say, \$2,000—making a total saving of \$5,500 annually. There will not be room in the State, War, and Navy Department building, when completed, for the Signal Office; in fact it will not accommodate all the other bureaus of the Department. The purchase of the building suggested by the Chief Signal Officer is, therefore, recommended.

The Monthly Weather Review of the Signal Service, and the Monthly Summary and Review of International Observations, have been regularly published during the year. Work has also been continued on the Meteorological Record. The publications known as Professional Papers and Signal Service Notes have been discontinued, in compliance with the law forbidding the publication of such papers. In the opinion of the Chief Signal Officer the publications in question have a direct bearing upon the current work of the Service, and provision should be made for their publication.

The Chief Signal Officer recommends the adoption by Congress of some provision for the promotion of officers of the Signal Corps, based upon length of service and ability to perform the duties which may be required of Signal officers.

MILITARY PRISON AT FORT LEAVENWORTH, KANSAS.

The board of commissioners, consisting of Maj. Gen. Alfred H. Terry, Adj. Gen. R. C. Drum, and Deputy Judge-Advocate-General Thomas F. Barr, have inspected the Military Prison, as required by law, and report that the condition of the dormitories, hospital, guard-rooms, kitchen, and all premises within the prison-yard is scrupulously clean and neat. The punishment book indicates the general good behavior of the prisoners, and the discipline of the prison is excellent. The food supplies are good, and for the first time since the establishment of the prison no complaints were made as to its amount or quality. The number of prisoners confined is five hundred and thirty-four. But nine persons took advantage of the permission accorded to all to appear before the commissioners and make complaints. While these were, for the most part, trivial, some of the complaints were investigated, and action will be taken by this office as recommended by the commissioners.

The commissioners investigated the complaint made in the last annual report of General Miles that miserable shoes made of worthless material were furnished from the Military Prison. They understand that General Miles referred to the shoes worn during the campaign against Geronimo and his band. The test of shoes in such a service, marching "over cacti and rocks" in a volcanic country, "where it was impossible to move cavalry and pack-trains," is a severe one. To determine the character of the material used at the prison in the manufacture of boots and shoes, and also whether there is room for improvement in the methods of their

manufacture, the commissioners examined the inspector of materials and the assistant quartermaster on duty, and after visiting the shops they are satisfied that every care is taken to secure the very best material, and conclude that the charge cannot be sustained. While there may be room for improvement in the manufacture of the shoes by hand-sewing, it is not conceded that it was through bad workmanship or bad material that the shoes used in the Apache campaign were rendered unserviceable.

RECORDS OF THE WAR OF THE REBELLION.

The volumes XIV and XV of series 1, the two parts of volume XVI, and part 1 of volume XVII, in all five books, have been published at the Government Printing Office, and distributed from the library of this Department. The index of part 2, volume XVII, is in type, and will probably be issued during December with volume XVIII. The text of part 2 of volume XXII, of parts 1 and 2 of volume XXIII, and of parts 1 and 2 of volume XXIV, has been stereotyped. The third part of volume XXIV and parts 1 and 2 of volume XXV are in the hands of the Public Printer. The text of the supplement to volume XII, which includes the record of the Fitz-John Porter court-martial, required to be published by the act of July 31, 1886, has been stereotyped and indexed, and will probably be issued during December. The manuscripts of volumes XXXI, XXXII, and XXXIII are arranged for the printer, but volume XXX is yet incomplete.

An estimate is again submitted for reprinting and binding 6,000 copies each of volumes I to V, as contemplated in the act of August 7, 1882.

THE SOLDIERS' HOME, DISTRICT OF COLUMBIA.

There are 946 inmates of the Soldiers' Home, and the rate of admission during the year exceeded that of any year since it was established. A large amount of money is due the Home from old accounts in the Treasury Department, which should be speedily settled, as the current income appears to be diminishing. The report of the commissioners shows a decrease of income this year of \$37,573.44 from the average income of the two preceding years.

The increased number of inmates renders it necessary that additional space for cooking and for dormitories should be provided. Plans and estimates have been adopted for a large extension to the main building, which will cost about \$150,000.

The maintenance of a large and handsome park, with a system of beautiful drives, entails a regular expense upon the Home, and the commissioners urge the propriety of an appropriation by Congress for the purpose of effecting necessary repairs to road-beds, bridges, &c. There are about ten miles in length of drives within the Home. The accessibility of this park has made it an attractive resort for the people of

Washington, and for the many strangers visiting the national capital. It is believed that an annual appropriation of \$6,000 would be sufficient for the purpose indicated.

A large well has been provided for the purpose of increasing the water supply of the post. The annex to the barracks building, which at the date of my last annual report was in course of construction, has been completed and is now occupied. A brick extension to the stables at the dairy has also been erected.

The reports of the commissioners and the Inspector-General exhibit in detail the fiscal affairs of the Home, and a recapitulation is deemed unnecessary.

STATE CLAIMS, UNDER ACT OF JUNE 27, 1882.

Congress by the act of August 4, 1886, 24 Statutes, 217, authorized the detail of three officers of the Army to assist the Secretary of War in examining and reporting upon the claims of the States and Territories mentioned in the act of June 27, 1882, 22 Statutes, 111, and an appropriation was made by the sundry civil act of August 4, 1886, 24 Statutes, 249, for payment of the expenses thereof. A board was convened by special order of October 6, 1886, composed of the following-named officers: Maj. James Biddle, Sixth Cavalry; Maj. Henry J. Farnsworth, inspector-general; Capt. Edward Hunter, First Cavalry. The War Department having no available quarters in which the Board could be established and the voluminous papers in the claims deposited, suitable rooms have been obtained and the work has begun on the claim of the State of Nevada, the first in order. In September last the second installment of the claim of the State of California was received, and the claims now before the Department for its action are as follows:

Nevada.....	\$372,003 11
Texas	1,842,443 78
Oregon	369,459 19
California (first installment)	64,591 51
California (second installment).....	2,938,623 22
Total.....	5,587,120 81

BUILDING FOR STATE, WAR, AND NAVY DEPARTMENTS

The construction of the west and center wings of this building has gone on rapidly during the past year. The roof is nearly finished, and the interior iron work so far advanced that the plastering can be carried on during the coming winter. It is believed that the wings will be ready for occupation in January, 1888. Appropriations are necessary during the ensuing session for furniture, carpets, file cases, and shelving for the new wings, so that they can be promptly occupied when completed. An estimate of \$130,000 has been submitted for the purpose, and the necessity for that amount is set forth in detail in the Book of Estimates.

MONUMENT AT WASHINGTON'S HEADQUARTERS AT NEWBURG, N. Y.

On June 16, 1886, a perspective view, plans, and specifications of the design selected and approved by the joint select committee on the Newburg centennial for the monument in that city were transmitted to this Department by Hon. Lewis Beach, chairman of that committee.

Under the operations of the joint resolutions of July 1, 1882, and March 3, 1883, a contract dated June 25, 1886, was entered into with Maurice J. Power, the designer of the monument, for its completion by October 17, 1887, and work began on the foundation of the structure August 17, 1886.

PEDESTAL OF THE STATUE OF PRESIDENT GARFIELD.

On February 6, 1886, Mr. J. Q. A. Ward, the contractor for erecting the pedestal of the statue of President Garfield, asked an extension of his time to May 1, 1887. This extension, for the purpose of more careful studies or designs for the figures on the pedestal, was granted. The commission, under authority conferred by the act of July 7, 1884, had selected the site at the intersection of Maryland avenue and First street southwest. As legislation is pending in the Forty-ninth Congress devoting this site to a statue of Columbus or Lafayette, it may become necessary to select another site for the statue of President Garfield.

STATUE OF GENERAL LAFAYETTE.

The commission for the purpose of "erecting a statue to the memory of General Lafayette and his compatriots," of which the Secretary of War is chairman, acting under the law approved March 3, 1885, met soon after the passage of that act, when it was decided that designs for the work should be invited from five sculptors of acknowledged ability in their profession, two of whom should be citizens of France and three of our own country.

Of the French sculptors the commission designated M. Bartholdi, and requested through the Department of State the services of the French Government in selecting the other sculptor to represent France. This action was, however, courteously declined, as the minister felt it indelicate to name a sculptor to be placed in competition with the one selected by the commission.

One of the American sculptors declined to compete on account of numerous engagements and disinclination to enter into public competition for any work. The commission then requested, through the Department of State, the services of two other French sculptors, which, by the kind offices of our minister to France, were obtained.

The commission now have the models submitted by four sculptors and have information of the shipment of the model of the remaining

competitor, so that in all probability the contract for the execution of this work will soon be made.

The designation of the site for the statue has been deferred until the model is selected, as the selection of the site must depend to some extent upon the character of statue to be erected.

REMOVAL OF THE RAWLINS STATUE.

By the act of Congress approved May 17, 1886, the Secretary of War was authorized and directed to have the statue of Maj. Gen. John A. Rawlins removed to a new site in the city of Washington, and the sum of \$500 was appropriated for the purpose. In pursuance of this authority he selected the public reservation known as "No. 33," between Eighth and Ninth streets west, at the intersection of Pennsylvania and Louisiana avenues. This selection was approved by a committee of the Society of the Army of the Tennessee. The removal of the statue to the new site was completed October 11, 1886.

THE GRANT RELICS.

The swords and military and civic testimonials lately belonging to General Grant, which were given to the United States by Mrs. Grant and the late William H. Vanderbilt, were delivered to the Director of the National Museum on the 5th instant, in accordance with the provisions of the joint resolution of Congress approved August 5, 1886. They remained in the custody of this Department until that date, awaiting the preparation of cases for their reception in the National Museum.

RECORDS OF THE DEPARTMENT.

The constant use of the rolls and record-books in the Department, especially those in the offices of the Adjutant General and the Surgeon General, is rapidly rendering them illegible, and it is manifest that measures for their preservation must speedily be provided. Of three methods suggested, viz, printing, copying, or lithographing, I regard the first named as preferable. To copy them would be but a temporary expedient, and lithographing is expensive and undesirable. The cost of printing is doubtless greater, but a volume, when published, would be accessible to a larger number of clerks, thus enabling the current work to be more expeditiously performed, and admitting of a reduction in the clerical force at an earlier date than otherwise would be possible.

Printing is therefore the best and most economical method, and I accordingly recommend that provision be made by Congress for the employment of a force of compositors to set up such work as may be necessary, the Public Printer to transfer the plates to the custody of the War Department after having printed a sufficient number of copies of each volume for the official and exclusive use of this Department.

I also recommend that in the meantime, in order to execute any work for which there may exist an urgent necessity, the Secretary of War may be authorized, in his discretion, to employ after office hours such

portion of the present clerical force as he may deem necessary, at a rate of compensation based upon their present salaries. The familiarity of the present clerical force with the records enables them to render better and more expeditious service than could possibly be obtained from new and inexperienced persons.

The compositors should be employed under the direction of the Secretary of War, inasmuch as the records, which are constantly under reference, could not be spared from the Department without seriously retarding the current work. Neither would it be judicious to permit the records to pass from the custody of the Department, as they contain information which could be successfully used in the fabrication of claims against the Government.

CONTINGENT EXPENSES OF THE ARMY.

The appropriation "for all contingent expenses of the Army not provided for by other estimates, and embracing all branches of the military service" has been reduced from the sum of \$30,000 appropriated in the act of 1885, to \$15,000 in the act of 1886, and is now so small that only the most important matters, or those involving small amounts, are approved for payment from that appropriation in order that there may be money on hand to provide for unforeseen contingencies. The result of this prudent policy has enabled the Secretary of War for several years, in the absence of any special contingency, to return part of this appropriation to the Treasury, as will be seen by the following statement:

Amount of appropriation for Army contingencies carried to the surplus fund:

June 30, 1883	\$531 37
June 30, 1884	10,501 03
June 30, 1885	15,905 94
June 30, 1886	21,353 53

Much embarrassment will result, however, when a contingency arises involving an amount which the Department will be unable to meet with this reduced appropriation, and I believe that it will be good policy and in the end more economical to provide a larger sum for Army contingencies, as the appropriation is by its terms under the immediate control of the Secretary of War, and is only expended in accordance with his orders in each case and upon his responsibility. The above table shows it is not used extravagantly. I accordingly recommend that the sum of \$30,000 be granted for this purpose, which is the sum appropriated for the fiscal years ending June 30, 1885, and June 30, 1886, while prior to these years it was \$40,000 and upwards.

ASSISTANT SECRETARY OF WAR.

Another year's experience in administering the Department has confirmed the views expressed in my annual report for 1885 that provision should be made for an Assistant Secretary of War. The constant in-

crease in the business of the Department renders it necessary that such an officer should be appointed. It is believed that salaries more commensurate with the arduous and responsible duties performed should be awarded to the principal officers in the office of the Secretary of War, and the estimates submitted are commended to the favorable consideration of Congress.

WILLIAM C. ENDICOTT,
Secretary of War.

APPENDIX.

Statement of Indian prisoners at present in confinement at Fort Marion and Fort Pickens, Florida

Chihuahua, Nana, and Josanie's party, captured last spring, arrived at Fort Marion April 13, 1886	77	
Number of men married	10	
Number of men unmarried	4	
Half-grown youths	2	
Number of women married	12	
Number of women unmarried	20	
Male children under 14 years of age	17	
Female children under 14 years of age	8	
	<hr/>	73
Died since confinement:		
Adult	1	
Children	3	
	<hr/>	4
	<hr/>	
Chatto's party, brought east last summer by Captain Dorst, Fourth Cavalry (sex and age not stated), supposed to be:		
Men	10	
Women	3	
	<hr/>	13
	<hr/>	
Total		86
Warm Spring Apaches, Chiricahuas, &c., brought to Fort Marion under charge of Lieutenant-Colonel Wade, Tenth Cavalry:		
Adults	278	
Indian children between 5 and 12 years of age	41	
Indian children under 4 years of age	62	
	<hr/>	381
Women and children of Geronimo's party, previously confined at San Antonio and afterwards ordered to be confined at Fort Marion:		
Females	11	
Boys	3	
Girls	3	
	<hr/>	17
Interpreters (not prisoners)	2	
	<hr/>	
Mangus party:		
Women	3	
Children	5	
	<hr/>	8
	<hr/>	
Total		492
Deduct from this number Indian youths, between the ages of 12 and 22, sent to Indian school at Carlisle, Pa., November 2, 1886:		
Boys	29	
Girls	8	
	<hr/>	37
And Indian youths, between the ages of 5 and 12 (sex not given), ordered to be sent to the Indian school at Carlisle, Pa., November 26, 1886	7	
	<hr/>	44
	<hr/>	
Total number of prisoners remaining at Fort Marion up to date		448
Male prisoners confined at Fort Pickens, Fla.:		
Geronimo and party	15	
Mangus and 1 buck	2	
	<hr/>	17
	<hr/>	
Grand total of Indian prisoners		465
	<hr/>	
Interpreter (not prisoner)	1	
Total number interpreters	3	
	<hr/>	
H. Ex. 1, pt. 2—4		49

Statement of appropriations under direction of the War Department for the fiscal year ending June 30, 1886, showing the amount appropriated under each title of appropriation, the amount drawn by requisition upon the Treasury, and the balances subject to requisition July 1, 1886.

Title of appropriation.	Balances July 1, 1885.	Appropriated July 1, 1885, to June 30, 1886.	Repayments July 1, 1885, to June 30, 1886.	Aggregate available.	Payments July 1, 1885, to June 30, 1886.	Carried to surplus fund June 30, 1886.	Balances June 30, 1886.
SALARIES, CONTINGENCIES, ETC.							
Salaries, office of Secretary of War	\$1,057 68	\$111,850 00		\$112,907 68	\$110,800 96	\$157 68	\$1,949 04
Salaries, office of Adjutant-General	16,779 57	703,700 00		720,479 57	687,069 24	4,779 57	28,630 76
Salaries, office of Inspector-General		3,720 00		3,720 00	3,586 66		133 34
Salaries, office of Military Justice	218 64	13,260 00		13,478 64	15,206 74	173 64	98 26
Salaries, Signal Office	544 42	50,660 00		51,204 42	50,610 31	284 42	309 69
Salaries, office of Quartermaster-General	3,346 59	230,355 00		233,701 59	218,132 15	1,357 05	14,212 39
Compensation and expenses of agents, Quartermaster's Department	1,564 35	30,000 00		31,564 35	27,211 69	1,564 35	2,783 31
Salaries, office of Commissary-General	279 01	43,730 00		44,009 01	43,465 51	79 01	404 49
Salaries, office of Surgeon-General	23,004 22	532,080 00		555,084 22	506,228 39	3,224 22	45,631 61
Salaries, office of Paymaster-General	644 56	64,910 00		65,554 56	61,934 69	509 56	3,110 31
Salaries, office of Chief of Ordnance	451 38	44,860 00		45,311 38	44,778 70	56 38	476 24
Salaries, office of Chief of Engineers	113 20	23,240 00		23,353 26	22,956 48	3 26	393 52
Salaries, office of Publication of Records of the Rebellion	4,914 95	32,280 00		37,194 95	31,299 43	3,569 93	2,325 59
Salaries, superintendent, &c., building corner Seventeenth and F streets.	227 50	6,650 00		6,877 50	6,569 41		308 09
Furniture and carpets, State, War, and Navy Department building	150 24			150 24		150 24	
Postage, War Department	36,289 74			36,289 74		36,289 74	
Postage to Postal Union countries, War Department	1,455 00	3,000 00		4,455 00	2,578 00	1,455 00	422 00
Contingent expenses, War Department	1 22	61,500 00		61,501 22	54,712 16	1 22	6,787 84
Stationery, War Department	4,565 06	30,000 00		34,565 06	22,789 20	3,306 06	8,469 80
Rent of buildings, War Department	321 04	41,800 00		42,121 04	41,000 00	61 04	1,060 00
Salaries of employés, Public Buildings and Grounds, under Chief Engineer	7 53	42,300 00		42,307 53	42,142 17	7 53	157 83
Contingent expenses, Public Buildings and Grounds, under Chief Engineer	1 84	500 00		501 84	498 00	1 84	2 00
Rent of office, Public Buildings and Grounds, under Chief Engineer		900 00		900 00	900 00		
Total salaries, contingent expenses, and postage	95,937 80	2,071,295 00		2,167,232 80	1,992,469 95	57,031 74	117,731 11
MILITARY ESTABLISHMENT.							
Expenses of Commanding-General's Office		1,750 00		1,750 00	1,719 63	30 37	
Expenses of recruiting	45,886 92	107,302 50		153,189 42	67,945 87	12,966 15	72,277 40
Contingencies of the Adjutant-General's Department	22 56	2,500 00		2,522 56	2,495 70	23 80	3 06
Signal Service	1,464 39	5,500 00		6,964 39	5,661 15	552 80	750 44
Pay, &c., of the Army	200,640 64	12,405,000 00		12,605,640 64	12,004,500 13	103,070 83	408,069 68
Subsistence of the Army	483,441 35	1,800,000 00		2,283,441 35	1,623,004 90	475,639 32	179,797 13
Regular supplies, Quartermaster's Department	82,260 31	2,771,000 00		2,853,260 31	2,670,485 32	82,722 43	99,992 56
Incidental expenses, Quartermaster's Department	9,041 97	690,000 00		699,041 97	680,365 19	11,454 04	7,222 74
Barracks and quarters	1,106 84	675,000 00		676,106 84	669,973 58	1,841 39	4,291 87
Transportation of the Army and its supplies	113,380 42	2,900,733 35		3,014,113 77	3,011,325 86	1,968 65	819 26

Transportation of the Army and its supplies, Pacific railroads.....	.....	410,684 07	.....	410,684 07	410,684 07	.....	.....
Fifty per cent. of arrears of Army transportation due certain land-grant railroads.....	125,011 83	125,000 00	.....	250,011 83	112,350 52	21,289 42	116,371 89
Horses for cavalry and artillery.....	1,077 97	180,000 00	.....	181,077 97	179,051 83	903 49	1,122 65
Construction and repair of hospitals.....	477 08	100,000 00	.....	100,477 08	97,555 30	479 43	2,442 35
Clothing, camp and garrison equipage.....	31 07	1,250,000 00	.....	1,250,031 07	1,231,318 50	18,261 39	451 18
Contingencies of the Army.....	35,063 38	30,000 00	.....	65,063 38	21,527 19	21,353 53	22,182 66
Medical and Hospital Department.....	27,045 97	225,000 00	.....	258,045 97	134,545 72	23,422 02	94,078 23
Medical Museum and Library.....	18 75	15,000 00	.....	18,018 75	15,018 75	.....	.....
Engineer depot at Willets Point, N. Y.....	.....	6,000 00	.....	6,000 00	5,500 00	.....	500 00
Ordnance, ordnance stores, and supplies.....	511 88	405,000 00	.....	405,511 88	405,087 87	279 41	144 60
Ordnance service.....	8,210 15	100,000 00	.....	108,210 15	99,957 99	8,212 76	39 40
Ordnance material (proceeds of sales).....	512,346 02	42,936 92	.....	555,282 94	70,239 50	.....	485,043 44
Manufacture of arms at national armories.....	.....	400,000 00	.....	400,000 00	400,000 00	.....	.....
Manufacture or purchase of magazine guns.....	1,255 00	.....	.....	1,255 00	.....	.....	1,255 00
Pay of Military Academy.....	35,732 23	228,845 00	.....	264,577 23	224,400 19	10,006 50	30,170 54
Current and ordinary expenses, Military Academy.....	.....	48,820 00	.....	48,820 00	42,339 34	3,099 92	2,780 74
Miscellaneous items and incidental expenses, Military Academy.....	219 88	15,620 00	.....	15,839 88	15,446 48	219 88	173 52
Total military establishment.....	1,684,186 61	24,941,601 84	.....	26,625,878 45	24,297,500 58	798,397 53	1,529,980 34
PUBLIC WORKS.							
Arsenals.							
Frankford Arsenal, Philadelphia, Pa.....	.....	797 50	.....	797 50	.....	.....	797 50
Benicia Arsenal, Benicia, Cal.....	.....	6,000 00	.....	6,000 00	6,000 00	.....	.....
Rock Island Arsenal, Rock Island, Ill.....	130,200 00	.....	.....	130,200 00	130,200 00	.....	.....
Springfield Arsenal, Springfield, Mass.....	15,000 00	.....	.....	15,000 00	15,000 00	.....	.....
San Antonio Arsenal, San Antonio, Tex.....	8,075 20	.....	.....	8,075 20	3,972 50	27 50	4,075 20
Rock Island Bridge, Rock Island, Ill.....	9,250 00	.....	.....	9,250 00	9,250 00	.....	.....
Repairs of arsenals.....	30,000 00	.....	.....	30,000 00	29,685 18	.....	314 82
Testing-machine.....	658 77	10,000 00	.....	10,658 77	10,000 00	658 77	.....
Powder Depot, Dover, N. J.....	.....	40,000 00	.....	40,000 00	40,000 00	.....	.....
Proving ground, Sandy Hook, N. J.....	.....	3,000 00	.....	3,000 00	3,000 00	.....	.....
Total arsenals.....	658 77	251,525 20	797 50	252,981 47	247,107 68	686 27	5,187 52
Deduct repayments in excess of payments.....	.....	.....	.....	.....	797 50	.....	.....
Actual expenditures.....	.....	.....	.....	.....	246,310 18	.....	.....
Fortifications.							
Armament of fortifications.....	254,603 87	450,000 00	.....	704,603 87	304,467 16	56,483 82	343,652 89
Board on fortifications or other defenses.....	35,000 00	.....	.....	35,000 00	7,400 58	.....	27,599 42
Machine-guns.....	.....	50,000 00	.....	50,000 00	28,033 60	.....	21,966 40
Powder and projectiles (proceeds of sales).....	52 56	.....	.....	52 56	.....	.....	52 56
Preservation and repair of fortifications.....	8,450 45	100,000 00	.....	108,450 45	93,434 86	7,035 08	7,980 51
Fort Marion, Florida.....	1,300 00	.....	.....	1,300 00	1,300 00	.....	.....
Fort Saint Philip, Mississippi River, Louisiana.....	9 33	.....	.....	9 33	9 33	.....	.....
Fort Scammel, Portland Harbor, Maine.....	181 30	.....	.....	181 30	181 30	.....	.....
Fort Pulaski, Savannah River, Georgia.....	34 43	.....	.....	34 43	34 43	.....	.....
Torpedoes for harbor defenses.....	41,500 00	105,000 00	.....	146,500 00	70,200 00	.....	76,300 00

Statement of appropriations under direction of the War Department for the fiscal year ending June 30, 1886, &c.—Continued.

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REPORT OF THE SECRETARY OF WAR.

Title of appropriation.	Balances July 1, 1885.	Appropriated July 1, 1885, to June 30, 1886.	Repayments July 1, 1885, to June 30, 1886.	Aggregate available.	Payments July 1, 1885, to June 30, 1886.	Carried to surplus fund June 30, 1886.	Balances June 30, 1886.
PUBLIC WORKS—continued.							
<i>Fortifications—Continued.</i>							
Purchase of sites for sea-coast defenses			\$100 28	\$100 28			\$100 28
Total fortifications	\$341, 131 94	\$705, 000	100 28	1, 046, 232 22	\$505, 061 26	\$63, 518 90	477, 652 06
Deduct repayments in excess of payments					100 28		
Actual expenditures					504, 960 98		
<i>Buildings and grounds in and around Washington.</i>							
Improvement and care of public grounds	152 22	57, 000 00		57, 152 22	55, 010 04	152 22	1, 989 96
Repairs, fuel, &c., Executive Mansion	2 32	23, 000 00		23, 002 32	22, 398 39	2 32	601 61
Lighting, &c., Executive Mansion	45	15, 000 00		15, 000 45	14, 341 07	45	658 93
Repairs to water-pipes and fire-plugs	40	2, 500 00		2, 500 40	2, 462 02	40	37 98
Telegraph to connect the Capitol with the Departments and Government Printing Office		1, 250 00		1, 250 00	1, 250 00		
Building for State, War, and Navy Departments	595, 292 62			595, 292 62	415, 000 00		180, 292 62
Increasing the water supply of Washington, D. C., and preservation of tunnel	529, 628 07	5, 000 00		534, 628 07	312, 335 00		222, 293 07
Erection of fish-ways at Great Falls	45, 000 00			45, 000 00	35, 623 69		9, 376 31
Elevator, Winder's building	93 30			93 30			93 30
Bridge across Potomac River near Georgetown, D. C.	140, 000 00			140, 000 00		140, 000 00	
Building for Army Medical Museum and Library	199, 800 00			199, 800 00	36, 500 00		163, 300 00
Total buildings and grounds in and around Washington	1, 509, 969 38	103, 750 00		1, 613, 719 38	894, 920 21	140, 155 39	578, 643 78
Buildings and grounds, Military Academy	3 05	14, 317 14		14, 320 19	14, 317 14	3 05	
<i>Military posts.</i>							
Fort Brown, Texas	25, 000 00			25, 000 00			25, 000 00
Military posts	125, 024 16	165, 000 00		290, 024 16	219, 996 09		70, 028 07
Military posts for the protection of the Rio Grande frontier			67	67			67
Army depot building, Saint Paul, Minn.		30, 000 00		30, 000 00	30, 000 00		
Army and Navy Hospital, Hot Springs, Ark.		12, 500 00		12, 500 00	12, 500 00		
Purchase of Fort Brown reservation, Texas		160, 000 00		160, 000 00			160, 000 00
Roads on Fort Leavenworth military reservation		10, 000 00		10, 000 00	10, 000 00		
Military post near the northern boundary of Montana (Fort Assiniboine) ..			25	25			25
Military post at Fort McKinney, Wyoming Territory			206 00	206 00			206 00
Maintenance of Army and Navy Hospital, Hot Springs, Ark.		19, 000 00		19, 000 00			19, 000 00
Purchase of Old Produce Exchange building and site, New York City		250, 000 00		250, 000 00	250, 000 00		

Remodeling Old Produce Exchange building, New York City.....		200,000 00		200,000 00	17,177 00		182,823 00
Total military posts.....	150,024 16	846,500 00	206 92	996,731 08	539,873 09		457,057 99
Deduct repayments in excess of payments.....					206 92		
Actual expenditures.....					539,466 17		
<i>Harbors and rivers.</i>							
Improving harbor at—							
Belfast, Me.....	2,800 00		6 80	2,806 80			2,806 80
Bangor and Penobscot River, Maine.....	19,300 00			19,300 00	19,250 68		49 32
Rockland, Me.....	15,500 00			15,500 00	12,578 01		2,921 99
Portland, Me.....	6,200 00			6,200 00	2,423 71		3,776 29
Breakwater at mouth of Saco River, Maine.....	7,200 00			7,200 00	7,173 64		26 36
Improving harbor at—							
Portsmouth, N. H.....	14,200 00			14,200 00	14,200 00		
Burlington, Vt.....	8,000 00			8,000 00	6,000 00		2,000 00
Swanton, Vt.....			326 93	326 93			326 93
Boston, Mass.....	10,383 30			10,383 30	841 18		9,542 12
Lynn, Mass.....	5,000 00			5,000 00			5,000 00
Nantucket, Mass.....	9,500 00			9,500 00	4,862 00		4,638 00
Newburyport, Mass.....	15,000 00			15,000 00	15,000 00		
Harbor of refuge, Sandy Bay, Cape Ann, Massachusetts.....	92,000 00			92,000 00	41,500 00		50,500 00
Harbor of refuge at Wood's Holl, Massachusetts.....			46 95	46 95			46 95
Improving harbor at—							
Wareham, Mass.....	4,000 00			4,000 00	3,961 77		38 23
Hyannis, Mass.....			80 81	80 81			80 81
Block Island, E. I.....	7,000 00			7,000 00	6,375 00		625 00
Improving Little Narragansett Bay, Rhode Island.....			143 04	143 04			143 04
Improving harbor at—							
Newport, R. I.....	4,000 00			4,000 00	3,625 00		375 00
Clinton, Conn.....			252 73	252 73			252 73
Black Rock, Conn.....	5,000 00			5,000 00	5,000 00		
Milford, Conn.....			241 02	241 02			241 02
New Haven, Conn.....	5,000 00			5,000 00	5,000 00		
Stonington, Conn.....			300 32	300 32			300 32
Southport, Conn.....			79 60	79 60			79 60
Buffalo, N. Y.....	57,000 00			57,000 00	47,700 00		9,300 00
Charlotte, N. Y.....	4,000 00			4,000 00	1,122 52		2,877 48
Improving Canarsie Bay, New York.....			199 11	199 11			199 11
Improving Echo Harbor, New Rochelle, N. Y.....	3,000 00		256 87	3,256 87			3,256 87
Improving Flushing Bay, New York.....			344 39	344 39			344 39
Improving harbor at—							
Dunkirk, N. Y.....	1,000 00			1,000 00	1,000 00		
Greenport, N. Y.....			300 78	300 78			300 78
Great Sodus Bay, New York.....	1,000 00		637 09	1,637 09			1,637 09
Little Sodus Bay, New York.....	1,000 00		1,417 28	2,417 28			2,417 28
Mamaroneck, N. Y.....			224 23	224 23			224 23
New Rochelle, N. Y.....	15,000 00		2,506 37	17,506 37			17,506 37
Ogdensburg, N. Y.....	5,000 00			5,000 00	4,726 10		273 90
Oswego, N. Y.....			194 16	194 16			194 16
Oak Orchard, N. Y.....			94 81	94 81			94 81

Statement of appropriations under direction of the War Department for the fiscal year ending June 30, 1886, &c.—Continued.

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REPORT OF THE SECRETARY OF WAR.

Title of appropriation.	Balances July 1, 1885.	Appropri- ated July 1, 1885, to June 30, 1886.	Repayments July 1, 1885, to June 30, 1886.	Aggregate available.	Payments July 1, 1885, to June 30, 1886.	Carried to surplus fund June 30, 1886.	Balances June 30, 1886.
PUBLIC WORKS—continued.							
<i>Harbors and rivers—Continued.</i>							
Improving harbor at—							
Plattsburg, N. Y.			\$88 06	\$88 06			\$88 06
Port Jefferson, N. Y.			384 36	384 36			384 36
Pultneyville, N. Y.			2 90	2 90			2 90
Rondout, N. Y.			60 36	60 36			60 36
Breakwater at Rouse's Point, Lake Champlain, N. Y.	\$33,650 00			33,650 00	\$11,500 00		22,150 00
Improving Sheepshead Bay, New York.			283 73	283 73			283 73
Improving harbor at—							
Sackett's Harbor, N. Y.			72 11	72 11			72 11
Saugerties, N. Y.	4,500 00		455 95	4,955 95			4,955 95
Wilson, N. Y.			32 29	32 29			32 29
Erie, Pa.	57,500 00		633 83	58,133 83			58,133 83
Ice-harbor at Marcus Hook, Pa.	5,000 00			5,000 00	5,000 00		
Improving harbor at Keyport, N. J.			951 99	951 99			951 99
Improving Raritan Bay, New Jersey.			692 75	692 75			692 75
Improving harbor at Delaware Breakwater, Delaware.	55,000 00			55,000 00	54,500 00		500 00
Ice-harbor at Reedy Island, Del.	17,500 00			17,500 00			17,500 00
Improving harbor at—							
Wilmington, Del.	15,000 00			15,000 00	2,000 00		13,000 00
Annapolis, Md.	9,205 98			9,205 98	1,205 98		8,000 00
Improving harbor at Baltimore, Md.			22,000 00	22,000 00			22,000 00
Improving harbor of Breton Bay, Leonardtown, Md.			49 51	49 51			49 51
Improving harbor at entrance of Saint Jerome's Creek, Maryland.	2,000 00		419 69	2,419 69			2,419 69
Improving harbors at Washington and Georgetown, D. C.	14,226 73			14,226 73	14,226 73		
Improving harbor at—							
Norfolk, Va.	47,000 00			47,000 00	42,453 19		4,546 81
Beaufort, N. C.	6,900 00			6,900 00	1,900 00		5,000 00
Improving Edenton Bay, North Carolina.			447 41	447 41			447 41
Improving harbor at—							
Charleston, S. C.	104,000 00			104,000 00	104,000 00		
Georgetown, S. C.	4,100 00			4,100 00	4,100 00		
Brunswick, Ga.			111 96	111 96			111 96
Savannah, Ga.	54,000 00			54,000 00	50,900 00		3,100 00
Improving Apalachicola Bay, Florida.			696 73	696 73			696 73
Improving harbor at Pensacola, Fla.	20,000 00			20,000 00	20,000 00		
Improving Tampa Bay, Florida.	10,000 00			10,000 00	10,000 00		
Improving harbor at—							
Mobile, Ala.	65,000 00			65,000 00	65,000 00		

Ashtabula, Ohio	10,000 00		10,000 00	10,000 00	
Cleveland, Ohio	99,997 00		99,997 00	13,500 00	86,497 00
Harbor of refuge near Cincinnati, Ohio	21,100 00		21,100 00	17,943 13	3,156 87
Improving harbor at—					
Fairport, Ohio	800 00		800 00	800 00	
Huron, Ohio		113 47	113 07		113 07
Sandusky City, Ohio	10,000 00		10,000 00		10,000 00
Toledo, Ohio	25,000 00		25,000 00	17,000 00	8,000 00
Vermillion, Ohio		658 68	658 68		658 68
Michigan City, Ind.	15,000 00		15,000 00	11,500 00	3,500 00
Chicago, Ill.	77 76		77 76		77 76
Waukegan, Ill.	2,000 00		2,000 00	1,000 00	1,000 00
Au Sable, Mich.	3,900 55	960 98	4,861 53		4,861 53
Black Lake, Mich.	2,000 00		2,000 00		2,000 00
Improving ice-harbor of refuge at Belle River, Michigan		47 10	47 10		47 10
Improving mouth and harbor of Cedar River, Michigan	8,000 00		8,000 00	5,329 98	2,670 02
Improving harbor at—					
Charlevoix, Mich.	2,000 00		2,000 00	1,000 00	1,000 00
Cheboygan, Mich.	4,000 00	990 66	4,990 66		4,990 66
Improving Eagle Harbor, Michigan	2,000 00	886 33	2,886 33		2,886 33
Improving harbor at—					
Frankfort, Mich.	2,000 00		2,000 00		2,000 00
Grand Haven, Mich.	15,000 00		15,000 00	5,000 00	10,000 00
Improving harbor of refuge, Lake Huron, Mich.		3,000 00	3,000 00		3,000 00
Harbor of refuge at Grand Marais, Mich.	15,000 00		15,000 00	10,856 38	4,143 62
Improving harbor at—					
Ludington, Mich.	3,000 00		3,000 00	2,000 00	1,000 00
Manistee, Mich.	4,000 00		4,000 00		4,000 00
Manistique, Mich.	2,000 00	1,501 79	3,501 79		3,501 79
Marquette, Mich.	11,000 00		11,000 00	1,500 00	9,500 00
Muskegon, Mich.	5,000 00		5,000 00		5,000 00
Ontonagon, Mich.		2,225 30	2,225 30		2,225 30
Pentwater, Mich.	3,000 00		3,000 00	500 00	2,500 00
Harbor of refuge at Portage Lake, Michigan	5,000 00		5,000 00	4,500 00	500 00
Improving harbor at—					
Saint Joseph, Mich.	15,000 00		15,000 00	4,000 00	11,000 00
Saugatuck, Mich.	2,000 00		2,000 00		2,000 00
South Haven, Mich.	6,000 00		6,000 00	1,000 00	5,000 00
Thunder Bay, Mich.	2,144 78	2,880 29	4,525 07		4,525 07
White River, Mich.	3,000 00		3,000 00	2,000 00	1,000 00
Steam launch or tug at harbor of refuge, Lake Huron, Michigan	10,000 00		10,000 00	500 00	9,500 00
Improving harbor at—					
Green Bay, Wis.	5,000 00		5,000 00	5,000 00	
Kenosha, Wis.	1,000 00	362 20	1,362 20		1,362 20
Kewaunee, Wis.	10,000 00		10,000 00	10,000 00	
Menomonee, Wis.	2,000 00	654 22	2,654 22		2,654 22
Milwaukee, Wis.	9,000 00		9,000 00	350 00	8,650 00
Harbor of refuge, Milwaukee Bay, Wisconsin	14,000 00		14,000 00	12,500 00	1,500 00
Improving harbor at—					
Oconto, Wis.	5,000 00		5,000 00	4,897 49	102 51
Pensaukee, Wis.	5,000 00		5,000 00	553 68	4,446 92
Racine, Wis.	3,000 00		3,000 00	1,000 00	2,000 00

Statement of appropriations under direction of the War Department for the fiscal year ending June 30, 1886, &c.—Continued.

Title of appropriation.	Balances July 1, 1885.	Appropriated July 1, 1885, to June 30, 1886.	Repayments July 1, 1885, to June 30, 1886.	Aggregate available.	Payments July 1, 1885, to June 30, 1886.	Carried to surplus fund June 30, 1886.	Balances June 30, 1886.
PUBLIC WORKS—continued.							
<i>Harbors and rivers—Continued.</i>							
Improving harbor at Sheboygan, Wis.....	\$13,000 00	.....	.....	\$13,000 00	\$12,997 78	.....	\$2 22
Improving harbor of refuge at entrance of Sturgeon Bay Canal, Wisconsin	3,000 00	.....	.....	3,000 00	1,300 00	.....	1,700 00
Dredging Superior Bay, Wisconsin	7,000 00	.....	.....	7,000 00	4,000 00	.....	3,000 00
Improving harbor at Two Rivers, Wis	2,000 00	.....	.....	2,000 00	2,000 00	.....	.....
Harbors of refuge on Lake Pepin, Wisconsin and Minnesota	28,000 00	.....	.....	28,000 00	14,000 00	.....	14,000 00
Ice-harbor at Dubuque, Iowa	8,000 00	.....	.....	8,000 00	4,000 00	.....	4,000 00
Improving harbor at—							
Duluth, Minn.	10,000 00	.....	.....	10,000 00	9,000 00	.....	1,000 00
Grand Marais, Minn.	2,000 00	.....	.....	2,000 00	500 00	.....	1,500 00
Breakwater and harbor of refuge between Straits of Fuca and San Francisco, Cal	141,373 08	.....	.....	141,373 08	.....	.....	141,373 08
Improving Humboldt Harbor and Bay, California	57,500 00	.....	\$4,863 64	62,363 64	.....	.....	62,363 64
Improving harbor at—							
Oakland, Cal	77,000 00	.....	.....	77,000 00	77,000 00	.....	.....
San Francisco, Cal	3,828 57	.....	.....	3,828 57	.....	.....	3,828 57
Redwood, Cal	3,000 00	.....	.....	3,000 00	.....	.....	3,000 00
Wilmington, Cal	30,000 00	.....	.....	30,000 00	29,000 00	.....	1,000 00
Improving Yaquina Bay, Oregon	1,000 00	.....	.....	1,000 00	.....	.....	1,000 00
Improving—							
Kennebunk River, Maine .....	.....	.....	336 34	336 34	.....	.....	336 34
Moosabec Bar at Jonesport, Me	9,300 00	.....	.....	9,300 00	9,246 34	.....	53 66
Cocheco River, New Hampshire	9,500 00	.....	.....	9,500 00	9,487 88	.....	12 12
Lamprey River, New Hampshire .....	.....	.....	19 42	19 42	.....	.....	19 42
Otter Creek, Vermont .....	.....	.....	648 34	648 34	.....	.....	648 34
Taunton River, Massachusetts	19,500 00	.....	.....	19,500 00	856 32	.....	18,643 68
Providence River and Narragansett Bay, Rhode Island .....	.....	.....	2,669 74	2,669 74	.....	.....	2,669 74
Pawtucket River, Rhode Island	48,500 00	.....	.....	48,500 00	48,500 00	.....	.....
Connecticut River, Connecticut	14,372 72	.....	.....	14,372 72	265 00	.....	14,107 72
Connecticut River between Hartford and Holyoke	10,000 00	.....	.....	10,000 00	.....	.....	10,000 00
Housatonic River, Connecticut	2,500 00	.....	.....	2,500 00	.....	.....	2,500 00
Thames River, Connecticut	10,000 00	.....	.....	10,000 00	5,250 00	.....	4,750 00
Buttermilk Channel, New York .....	.....	.....	324 97	324 97	.....	.....	324 97
East Chester Creek, New York .....	.....	.....	48 90	48 90	.....	.....	48 90
Gedney's Channel, New York	182,500 00	.....	.....	182,500 00	40,000 00	.....	142,500 00
Removing obstructions in East River and Hell Gate, New York	240,000 00	.....	.....	240,000 00	170,000 00	.....	70,000 00
Improving channel in Gowanus Bay, New York .....	.....	.....	167 74	167 74	.....	.....	167 74

Improving—

Grass River at Massena, N. Y.	2,500 00	448 60	2,948 60		2,948 60
Harlem River, New York	400,000 00		400,000 00		400,000 00
Hudson River, New York	30,000 00		30,000 00	2,000 00	28,000 00
Newtown Creek, New York	5,000 00	1,309 53	6,309 53		6,309 53
Niagara River, New York		587 52	587 52		587 52
Sumpawamus Inlet, New York		81 88	81 88		81 88
Elizabeth River, New Jersey		580 84	580 84		580 84
Manasquan River, New Jersey	1,000 00		1,000 00		1,000 00
Mantua Creek, New Jersey	3,000 00		3,000 00		3,000 00
Maurice River, New Jersey	14,000 00		14,000 00	14,000 00	
Passaic River, New Jersey		810 78	810 78		810 78
Rahway River, New Jersey		179 60	179 00		179 60
Raritan River, New Jersey	5,000 00		5,000 00	4,395 00	605 00
Rancocas River, New Jersey		100 09	100 09		100 09
Raccoon River, New Jersey	2,242 77		2,242 77		2,242 77
Salem River, New Jersey	1,490 66		1,490 66		1,490 66
Shrewsbury River, New Jersey		221 70	221 70		221 70
South River, New Jersey		361 27	361 27		361 27
Woodbury Creek, New Jersey	4,549 69		4,549 69		4,549 69
Allegheny River, Pennsylvania		634 29	634 29		634 29
Delaware River, Pennsylvania and New Jersey	152,000 00		152,000 00	108,000 00	44,000 00
Delaware River near Cherry Island Flats, Pennsylvania and Delaware	821 58		821 58	821 58	
Frankford Creek, Pennsylvania	116 72	147 78	264 50		264 50
Schuylkill River, Pennsylvania	10,000 00		10,000 00	10,000 00	
Broadkill River, Delaware	13,202 58		13,202 58	13,202 58	
Saint Jones River, Delaware	12,882 10		12,882 10	12,882 10	
Choptank River, Maryland		109 28	109 28		109 28
Corsica Creek, Maryland		308 86	308 86		308 86
Chester River, Maryland	2,708 54		2,958 54		2,958 54
Susquehanna River near Havre de Grace, Md.	11,000 00		11,000 00	10,580 93	419 07
Water passage between Deal's Island and the mainland, Maryland	4,500 00	169 91	4,669 91		4,669 91
Potomac River	331,207 13		331,207 13	180,946 72	144,260 41
Wicomico River, Maryland		1,372 80	1,372 80		1,372 80
Appomattox River, Virginia	5,000 00		5,000 00	4,155 00	845 00
Archer's Hope River, Virginia		20 63	20 63		20 63
Dan River, Virginia and North Carolina		470 97	470 97		470 97
James River, Virginia	17,136 56		17,136 56	15,636 56	1,500 00
Mattaponi River, Virginia	2,000 00	102 20	2,102 20		2,102 20
North Landing River, Virginia and North Carolina	1,500 00		1,500 00		1,500 00
Neabsco Creek, Virginia		57 27	57 27		57 27
New River, Virginia and West Virginia	3,000 00		3,000 00	2,533 43	466 57
Nottaway River, Virginia		246 16	246 16		246 16
Pamunky River, Virginia	1,500 00	256 39	1,756 39		1,756 39
Potomac River at Mount Vernon		57 14	57 14		57 14
Rappahannock River, Virginia	8,000 00		8,000 00	7,454 74	545 26
Staunton River, Virginia		520 83	520 83		520 83
Totnsky River, Virginia		400 82	400 82		400 82
Urbana Creek, Virginia		28 59	28 59		28 59
York River, Virginia	7,000 00		7,000 00	5,993 72	1,006 28
Guyandotte River, West Virginia		2,000 00	2,000 00		2,000 00
Great Kanawha River, West Virginia	162,500 00		162,500 00	120,000 00	42,500 00

Statement of appropriations under direction of the War Department for the fiscal year ending June 30, 1886, &c.—Continued.

Title of appropriation.	Balances July 1, 1885.	Appropriated July 1, 1885, to June 30, 1886.	Repayments July 1, 1885, to June 30, 1886.	Aggregate available.	Payments July 1, 1885, to June 30, 1886.	Carried to surplus fund June 30, 1886.	Balances June 30, 1886.
PUBLIC WORKS—continued.							
<i>Harbors and rivers—Continued.</i>							
Improving—							
Little Kanawha River, West Virginia.....	\$10,000 00	.....	.....	\$10,000 00	\$9,500 00	.....	\$500 00
Mouongahela River, West Virginia.....	3,500 00	.....	.....	3,500 00	100 00	.....	3,400 00
Shenandoah River, West Virginia.....	15,812 20	.....	\$271 20	16,083 40	.....	.....	16,083 40
Big Sandy River, West Virginia and Kentucky.....	7,500 00	.....	.....	7,500 00	7,000 00	.....	500 00
Cape Fear River, North Carolina.....	59,248 70	.....	.....	59,248 70	55,000 00	.....	4,248 70
Cape Fear River from Wilmington to Fayetteville, North Carolina.....	5,100 00	.....	.....	5,100 00	5,100 00	.....	.....
Currituck Sound and North River Bar, North Carolina.....	.....	.....	1,500 00	1,500 00	.....	.....	1,500 00
French Broad River, North Carolina.....	.....	.....	159 77	159 77	.....	.....	159 77
Meherin River, North Carolina.....	.....	.....	415 47	415 47	.....	.....	415 47
Neuse River, North Carolina.....	13,200 00	.....	.....	13,200 00	6,400 00	.....	6,800 00
New River, North Carolina.....	9,400 00	.....	.....	9,400 00	9,400 00	.....	.....
Pamlico and Tar Rivers, North Carolina.....	2,500 00	.....	.....	2,500 00	2,500 00	.....	.....
Roanoke River, North Carolina.....	3,000 00	.....	300 24	3,300 24	.....	.....	3,300 24
Yadkin River, North Carolina.....	14,000 00	.....	.....	14,000 00	5,719 40	.....	8,280 60
Edisto River, South Carolina.....	.....	.....	280 67	280 67	.....	.....	280 67
Ashley River, South Carolina.....	2,000 00	.....	.....	2,000 00	2,000 00	.....	.....
Santee River, South Carolina.....	14,400 00	.....	.....	14,400 00	13,500 00	.....	900 00
Salkahatchie River, South Carolina.....	.....	.....	75 83	75 83	.....	.....	75 83
Wappoo Cnt, South Carolina.....	3,000 00	.....	.....	3,000 00	3,000 00	.....	.....
Altamaha River, Georgia.....	.....	.....	451 87	451 87	.....	.....	451 87
Chattahoochee River, Georgia and Alabama.....	25,000 00	.....	.....	25,000 00	17,000 00	.....	8,000 00
Coosa River, Georgia and Alabama.....	17,000 00	.....	.....	17,000 00	17,000 00	.....	.....
Cumberland Sound, Georgia and Florida.....	.....	.....	665 00	665 00	.....	.....	665 00
Flint River, Georgia.....	5,000 00	.....	.....	5,000 00	4,000 00	.....	1,000 00
Oconee River, Georgia.....	.....	.....	78	78	.....	.....	78
Oostenaula and Coosawattie Rivers, Georgia.....	1,000 00	.....	121 86	1,121 86	.....	.....	1,121 86
Romley Marsh, Georgia.....	.....	.....	395 07	395 07	.....	.....	395 07
Savannah River, Georgia.....	.....	.....	1,057 86	1,057 86	.....	.....	1,057 86
Saint Augustin's Creek, Georgia.....	3,417 66	.....	.....	3,417 66	.....	.....	3,417 66
Apalachicola River, Florida.....	1,000 00	.....	.....	1,000 00	1,000 00	.....	.....
Choctawhatchee River, Florida and Alabama.....	5,000 00	.....	.....	5,000 00	5,000 00	.....	.....
Escambia and Conecuh Rivers, Florida and Alabama.....	5,000 00	.....	.....	5,000 00	5,000 00	.....	.....
Inside passage between Fernandina and Saint John's, Florida.....	4,000 00	.....	.....	4,000 00	.....	.....	.....
Peas Creek, Florida.....	.....	.....	434 45	434 45	.....	.....	434 45
Saint John's River, Florida.....	33,000 00	.....	484 07	33,000 00	28,024 84	.....	4,975 16
Suwanee River, Florida.....	.....	.....	60 00	60 00	.....	.....	60 00
Volusia Bar, Florida.....	.....	.....	159 74	159 74	.....	.....	159 74

Withlacoochee River, Florida.....		156 80	156 80		156 80
Black Warrior River, Alabama.....	47,000 00		47,000 00	1,000 00	48,000 00
Big Black River, Mississippi.....		249 73	249 73		249 73
Tallahpossa River, Alabama.....	5,000 00		5,000 00	5,000 00	
Horn Island Pass, Mississippi.....	5,000 00		5,000 00		5,000 00
Pearl River, Mississippi.....	5,000 00		5,000 00	5,000 00	
Roadstead into Back Bay of Biloxi, Mississippi.....	4,988 55		4,988 55		4,988 55
Steele's Bayou, Mississippi.....		5 26	5 26		5 26
Tchula Lake, Mississippi.....		145 84	145 84		145 84
Yazoo River, Mississippi.....		1 47	1 47		1 47
Amite River, Louisiana.....		1 99	1 99		1 99
Bayou Black, Louisiana.....		30 00	30 00		30 00
Bayou Beuf, Louisiana.....		4 32	4 32		4 32
Bayou Bartholomew, Louisiana and Arkansas.....		18 68	18 68		18 68
Cane River, Louisiana.....		74 69	74 69		74 69
Calcasieu Pass, Louisiana.....	2,800 00	125 25	2,925 25		2,925 25
Loggy Bayou, Lake Bistena, and the Dorcheat, Louisiana.....		91 79	91 79		91 79
Calcasieu River, Louisiana.....	16,000 00	255 46	16,255 46		16,255 46
Bayou D'Arbonne, Louisiana.....		15 93	15 93		15 93
Red River, Louisiana.....	12,000 00		12,000 00	11,075 00	925 00
Bayou Teche, Louisiana.....	14,200 00		14,200 00	7,500 00	6,700 00
Connecting Bayou Teche with Grand Lake at Charenton, Louisiana.....	21,700 00	400 05	22,100 05		22,100 05
Improving Tickfaw River, Louisiana.....		3 72	3 72		3 72
Protection of river bank at Fort Brown, Tex.....	1,000 00		1,000 00		1,000 00
Improving—					
Ship channel in Galveston Bay, Texas.....	144,500 00	15,370 50	159,870 50		159,870 50
Nechee River, Texas.....	11,642 37	25 47	11,667 84		11,667 84
Pasco Cavallo, Texas.....	5,000 00		5,000 00	5,000 00	
Sabine River, Texas.....	4,000 00	546 58	4,546 58		4,546 58
Sabine Pass, Texas.....	49,997 90		49,997 90	49,997 90	
Removing obstructions in Arkansas River, Arkansas and Kansas.....	3,000 00		3,000 00	2,000 00	1,000 00
Improving—					
L'Angeuille River, Texas.....	1,500 00		1,500 00	1,000 00	500 00
Onachita River, Arkansas and Louisiana.....		92 06	92 06		92 06
Saline River, Arkansas.....	55		55		55
White River above Buffalo Shoals, Arkansas.....		60	60		60
Saint Francis River, Arkansas.....	1,500 00		1,500 00	1,500 00	
White River, Arkansas.....	18,000 00		18,000 00	12,000 00	6,000 00
Big Hatchee River, Tennessee.....		233 44	233 44		233 44
Cumberland River above Nashville, Tennessee.....	25,000 00		25,000 00	15,000 00	10,000 00
Hiwassee River, Tennessee.....	2,500 00		2,500 00	2,500 00	
Tennessee River below Chattanooga, Tennessee.....	110,000 00		110,000 00	110,000 00	
Big Sandy River, Kentucky.....	5,000 00		5,000 00	5,000 00	
Cumberland River above mouth of the Jellico, Kentucky.....	5,000 00		5,000 00		5,000 00
Kentucky River, Kentucky.....	250,000 00		250,000 00	160,000 00	90,000 00
Falls of the Ohio River at Louisville, Ky.....	284,000 00		284,000 00	69,500 00	214,500 00
Ohio River.....	364,172 54		364,172 54	285,569 41	78,603 13
Rocky River, Ohio.....		119 31	119 31		119 31
Sandusky River, Ohio.....	400 00	228 47	628 47		628 47
Wabash River, Indiana and Illinois.....	24,000 00		24,000 00	21,000 00	3,000 00
Calumet River, Illinois.....	50,000 00		50,000 00		50,000 00
Illinois River, Illinois.....	10,000 00		10,000 00	1,000 00	9,000 00

Title of appropriation.	Balances July 1, 1885.	Appropri- ated July 1, 1885, to June 30, 1886.	Repayments July 1, 1885, to June 30, 1886.	Aggregate available.	Payments July 1, 1885, to June 30, 1886.	Carried to surplus fund June 30, 1886.	Balances June 30, 1886.
PUBLIC WORKS—continued.							
<i>Harbors and rivers—Continued.</i>							
Improving Mississippi River.....	\$81,520 00	.....	.....	\$81,520 00	\$58,628 09	.....	\$22,891 91
Reservoirs at headwaters of Mississippi River.....	63,389 25	.....	.....	63,389 25	49,033 10	.....	14,356 15
Gauging the waters of Lower Mississippi and its tributaries.....	1,700 00	.....	.....	1,700 00	1,455 00	.....	245 00
Improving—							
Mississippi, Missouri, and Arkansas Rivers.....	75,000 00	.....	.....	75,000 00	75,000 00	.....	.....
Mississippi River from Des Moines Rapids to mouth of Illinois River, Illinois and Missouri.....	65,000 00	.....	.....	65,000 00	50,000 00	.....	15,000 00
Mississippi River between mouths of Ohio and Illinois Rivers, Illinois and Missouri.....	75,000 00	.....	.....	75,000 00	34,541 47	.....	40 458 53
Survey of Mississippi River.....	13,000 00	.....	.....	13,000 00	13,000 00	.....	.....
Improving—							
Mississippi River from Saint Paul to Des Moines Rapids, Minnesota, Iowa, Missouri, Illinois, and Wisconsin.....	94,000 00	.....	.....	94,000 00	73,000 00	.....	21,000 00
Des Moines Rapids, Mississippi River, Iowa and Illinois.....	27,000 00	.....	.....	27,000 00	17,000 00	.....	10,000 00
Dry-dock at the Des Moines Rapids Canal, Mississippi River.....	5,000 00	.....	.....	5,000 00	5,000 00	.....	.....
Removal of bar in Mississippi River opposite Dubuque, Iowa.....	5,000 00	.....	.....	5,000 00	5,000 00	.....	.....
Removing obstructions in Mississippi River.....	25,000 00	.....	.....	25,000 00	17,500 00	.....	7,500 00
Constructing jetties and other works at South Pass, Mississippi River.....	.....	\$125,000 00	.....	125,000 00	125,000 00	.....	.....
Improving—							
Missouri River from mouth to Sioux City, Iowa.....	331,000 00	.....	.....	331,000 00	258,264 84	.....	72,735 16
Missouri River from Sioux City, Iowa, to Fort Benton, Mont.....	48,700 00	.....	.....	48,700 00	48,700 00	.....	.....
Survey of Missouri River from its mouth to Fort Benton, Mont.....	8,500 00	.....	.....	8,500 00	7,500 00	.....	1,000 00
Survey of Missouri River above Missouri River Falls, at Fort Benton, Mont.....	15,000 00	.....	.....	15,000 00	.....	.....	15,000 00
Removing obstructions in Missouri River.....	34,000 00	.....	.....	34,000 00	9,000 00	.....	25,000 00
Improving—							
Gasconade River, Missouri.....	.....	.....	\$929 05	929 05	.....	.....	929 05
Detroit River, Michigan.....	140,000 00	.....	.....	140,000 00	74,000 00	.....	66,000 00
Grand River, Michigan.....	18,000 00	.....	.....	18,000 00	15,000 00	.....	3,000 00
Hay Lake Channel, Sault Sainte Marie River, Michigan.....	85,000 00	.....	.....	85,000 00	53,000 00	.....	32,000 00
Fox and Wisconsin Rivers, Wisconsin.....	170,000 00	.....	.....	170,000 00	106,000 00	.....	64,000 00
Constructing dam at Goose Rapids, Red River of the North, Minnesota and Dakota.....	46,900 00	.....	47 65	46,947 65	.....	.....	46,947 65
Improving—							
Red River of the North, Minnesota and Dakota.....	4,000 00	.....	.....	4,000 00	3,500 00	.....	500 00
Minnesota River, Minnesota.....	.....	.....	42 00	.....	.....	.....	42 00
Yellowstone River, Montana and Dakota.....	5,000 00	.....	.....	5,000 00	5,000 00	.....	.....
Mokelumne River, California.....	3,500 00	.....	.....	3,500 00	3,457 48	.....	42 52

Sacramento and Feather Rivers, California.....	217,000 00			217,000 00	41,000 00		176,000 00
Petalumas Creek, California.....			2,343 09	2,343 09			2,343 09
Colorado River, Nevada, California, and Arizona.....	4,000 00			4,000 00	4,000 00		
Columbia River at Cascades, Oregon.....	17,500 00			17,500 00	14,005 15		3,494 85
Gauging waters of Columbia River, Oregon.....	100 00			100 00	100 00		
Improving—							
Mouth of Columbia River, Oregon.....	20,000 00			20,000 00	18,800 00		1,200 00
Upper Columbia and Snake Rivers, Oregon.....	8,000 00			8,000 00	8,000 00		
Upper Columbia River, Oregon.....			2,050 00	2,050 00			2,050 00
Umpqua River, Oregon.....	4,685 89			4,685 89	4,685 89		
Willamette River above Portland, Oregon.....	2,500 00			2,500 00	2,500 00		
Surveys to connect Delaware and Chesapeake Bays.....			2,803 98	2,803 98			2,803 98
Testing-machine invented by M. J. Adams.....			58 74	58 74			58 74
Examinations and surveys at South Pass, Mississippi River.....	3,413 63	6,492 00		9,905 63	9,905 63		
Examinations, surveys, and contingencies of rivers and harbors.....	60,395 30			60,395 30	48,036 05		12,359 25
Removing sunken vessels or craft obstructing or endangering navigation.....		43,633 39		43,633 39	43,633 39		
Survey of Hennepin Canal.....	8,000 00			8,000 00	8,000 00		
Operating and care of canals and other works of navigation.....		230,875 00		230,875 00	230,875 00		
Total harbors and rivers.....	6,904,203 34	406,000 39	103,038 14	7,413,241 87	4,197,368 89		3,215,872 98
Deduct repayments in excess of payments.....					103,038 14		
Actual expenditures.....					4,094,330 75		
Total public works.....	8,905,990 64	2,327,092 73	104,142 84	11,337,226 21	6,398,448 27	\$204,363 61	4,734,414 33
Deduct repayments in excess of payments.....					104,142 84		
Actual expenditures.....					6,294,305 43		
MISCELLANEOUS OBJECTS.							
Signal Service.							
Observation and report of storms.....	74,361 29	246,000 00		320,361 29	218,347 38	29,344 78	72,669 13
Construction, maintenance, and repair of military telegraph lines.....			236 20	236 20		236 20	
Maintenance and repair of military telegraph lines.....	3,856 87	24,000 00		27,856 87	25,707 78	1,444 54	704 55
Signal Service:							
Medical department.....	6,462 63	7,100 00		13,562 63	5,456 99	957 45	7,148 19
Pay.....	92,244 10	247,301 51		339,545 61	234,549 85	36,015 91	68,979 85
Subsistence.....	8,353 87	155,000 00		163,353 87	132,585 35	11,080 94	19,687 58
Regular supplies.....	6,250 01	58,638 40		64,888 41	57,624 86	5,468 48	1,795 07
Incidental expenses.....	526 74	1,954 00		2,480 74	1,363 71	466 74	650 29
Transportation.....	21,440 60	35,505 00		56,945 60	24,793 64	13,576 72	18,575 24
Barracks and quarters.....	2,743 58	85,608 00		88,351 58	86,782 95	1,431 78	136 85
Clothing, camp and garrison equipage.....	17,941 67	2,873 89		20,815 56	2,477 57	17,896 05	441 94
Ordnance stores.....		100 00		100 00	85 58		14 42
Observation and exploration in the Arctic Seas.....	1,592 00			1,592 00	960 29		631 71
Establishing signal stations on island of Nantucket.....	40,000 00			40,000 00	40,000 00		

Title of appropriation.	Balances July 1, 1885.	Appropriated July 1, 1885, to June 30, 1886.	Repayments July 1, 1885, to June 30, 1886.	Aggregate available.	Payments July 1, 1885, to June 30, 1886.	Carried to surplus fund June 30, 1886.	Balances June 30, 1886.
MISCELLANEOUS OBJECTS—continued.							
<i>Signal Service—Continued.</i>							
Repair of submarine cable, Block Island Bay		\$5,000 00		\$5,000 00	\$5,000 00		
Total Signal Service	\$275,773 36	869,080 80	\$236 20	1,145,090 36	835,735 95	\$117,919 59	\$101,434 82
Deduct repayments in excess of payments					236 20		
Actual expenditures					835,499 75		
<i>National cemeteries.</i>							
National cemeteries	1,728 37	100,000 00		101,728 37	101,429 30	87 17	211 90
Carson City Cemetery, Nevada			512 50	512 50			512 50
Fort Gratiot Cemetery, Michigan	2,985 00			2,985 00	2,874 25		110 75
Pay of superintendents of national cemeteries	863 17	80,440 00		61,803 17	60,066 48	642 50	594 19
Headstones for graves of soldiers in private cemeteries	8,258 28			8,258 28	5,712 31		2,545 97
Road from Springfield to the National Cemetery, Missouri	20,000 00	5,000 00		25,000 00	21,450 00		3,550 00
Road from Fort Scott to the National Cemetery, Kansas	873 70			873 70			873 70
Road from Chattanooga to the National Cemetery, Tennessee	53 87			53 87			53 87
Road from Baton Rouge to the National Cemetery, Louisiana		6,000 00		6,000 00			6,000 00
Road from Marietta to National Cemetery, Georgia		5,000 00		5,000 00			5,000 00
Monument Baxter Springs Cemetery, Kansas		4,000 00		4,000 00	4,000 00		
Funeral expenses of General U. S. Grant		19,343 19		19,343 19	19,343 19		
Total national cemeteries	34,762 39	199,783 19	512 50	235,058 08	214,875 53	729 7	19,452 88
Deduct repayments in excess of payments					512 50		
Actual expenditures					214,363 03		
<i>Civil surveys and Mississippi River Commission.</i>							
Survey of northern and northwestern lakes	308 15	3,000 00		3,308 15	1,794 64	519 45	994 06
Transportation of reports and maps to foreign countries	389 42	200 00		589 42	8 25	189 42	391 75
Surveys and reconnaissances in military divisions and departments	1,400 00	5,000 00		6,400 00	573 99		5,826 01
Survey of Gettysburg battle-field	8,500 00			8,500 00	1,000 00		7,500 00
Survey of boundary lines between Indian Territory and Texas		10,000 00		10,000 00	2,500 00		7,500 00
Mississippi River Commission	16,000 00			16,000 00	12,505 00		3,495 00
Total civil surveys and Mississippi River Commission	26,597 57	18,200 00		44,797 57	18,381 88	708 87	25,706 82

Artificial limbs and appliances, and support of transient paupers.

Artificial limbs	9,442 69	575,000 00	-----	584,442 69	488,501 80	7,405 16	88,535 73
Appliances for disabled soldiers	2,214 00	2,000 00	-----	4,214 00	302 50	1,214 00	2,697 50
Trusses for disabled soldiers	-----	5,000 00	-----	5,000 00	5,000 00	-----	-----
Support and medical treatment of transient paupers	1,250 00	15,000 00	-----	16,250 00	15,000 00	-----	1,250 00
Maintenance of Garfield Hospital	-----	7,500 00	-----	7,500 00	7,500 00	-----	-----
Total artificial limbs, &c	12,906 69	604,500 00	-----	617,406 69	516,304 30	8,619 16	92,483 23

Miscellaneous.

Support of Military Prison, Fort Leavenworth, Kans	8,552 40	91,167 76	-----	99,720 16	82,816 91	1,348 32	15,554 93
Publication of Official Records War of the Rebellion	31,000 00	36,000 00	-----	67,000 00	51,000 00	-----	16,000 00
Medical and Surgical History	-----	-----	226 34	226 34	-----	-----	226 34
Expenses of military convicts	8,980 99	10,000 00	-----	18,980 99	6,208 70	4,257 82	8,514 47
Artillery School, Fortress Monroe, Virginia	16	5,000 00	-----	5,000 16	4,600 00	16	400 00
Support of National Home for Disabled Volunteer Soldiers	-----	1,472,000 00	-----	1,472,000 00	1,472,000 00	-----	-----
Support of Soldiers' Home	449,483 24	259,755 63	-----	709,238 87	175,493 85	-----	533,745 02
Arming and equipping the militia	266,359 70	200,000 00	-----	466,359 70	302,117 44	-----	164,242 26
Total miscellaneous	764,376 49	2,073,923 39	226 34	2,838,526 22	2,094,236 90	5,606 30	738,683 02
Deduct repayment in excess of payments	-----	-----	-----	-----	226 34	-----	-----
Actual expenditures	-----	-----	-----	-----	2,094,010 56	-----	-----

War claims of volunteers.

Collection and payment of bounty, prize-money, and other claims of colored soldiers and sailors	2,176 38	2,000 00	-----	4,176 38	1,058 77	1,526 83	1,590 78
Pay of two- and three-year volunteers	-----	-----	12,537 16	12,537 16	-----	12,537 16	-----
Extra pay to officers and men who served in the Mexican war	-----	42,765 93	-----	42,765 93	42,765 93	-----	-----
Collecting, drilling, and organizing volunteers	-----	-----	178 22	178 22	-----	178 22	-----
Transportation of officers and their baggage	-----	-----	195 62	195 62	-----	195 62	-----
Services and supplies of Montana volunteers in the Nez Percé Indian war	807 00	-----	-----	807 00	-----	-----	807 00
Horses and other property lost in the military service	1,100 06	-----	-----	1,100 06	127 06	-----	973 00
Bounty under act of July 28, 1866	-----	-----	200 00	200 00	-----	200 00	-----
Bounty to Fifteenth and Sixteenth Missouri Cavalry Volunteers	-----	100 00	-----	100 00	100 00	-----	-----
Capture of Jefferson Davis	2,089 38	-----	-----	2,089 38	-----	-----	2,089 38
Rogue River Indian war	237 14	-----	-----	237 14	137 14	-----	100 00
Three months' pay proper	-----	18,500 00	-----	18,500 00	18,500 00	-----	-----
Total war claims of volunteers	6,409 96	63,365 93	13,111 00	82,886 89	62,688 90	14,037 83	5,560 16
Deduct repayments in excess of payments	-----	-----	-----	-----	13,111 00	-----	-----
Actual expenditures	-----	-----	-----	-----	49,577 90	-----	-----

War claims of States.

Reimbursing State and citizens of California for expenses in suppressing Modoc Indian hostilities	298 51	-----	-----	298 51	-----	-----	298 51
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Statement of appropriations under direction of the War Department for the fiscal year ending June 30, 1886, &c.—Continued.

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REPORT OF THE SECRETARY OF WAR.

Title of appropriation.	Balances July 1, 1885.	Appropriated July 1, 1885, to June 30, 1886.	Repayments July 1, 1885, to June 30, 1886.	Aggregate available.	Payments July 1, 1885, to June 30, 1886.	Carried to surplus fund June 30, 1886.	Balances June 30, 1886.
MISCELLANEOUS OBJECTS—continued.							
<i>War claims of States—Continued.</i>							
Refund to the State of Georgia for money expended for common defense in 1777.....	\$35,555 42			\$35,555 42	\$35,555 42		
Total war claims of States	35,853 93			85,853 93	35,555 42		\$298 51
<i>Private relief acts.</i>							
Claims of loyal citizens for supplies furnished during the rebellion.....	6,939 00			6,939 00			6,939 00
Claims for quartermaster's stores and commissary supplies	2,743 59	\$530,109 40		532,852 99	507,230 43		25,622 56
Awards for quartermaster's stores and commissary supplies taken by the Army in Tennessee	130 00			130 00			130 00
Miscellaneous claims audited by Third Auditor, under section 4, act of June 14, 1878	2,269 75			2,269 75			2,269 75
Relief of Joseph W. Parish		58,341 85		58,341 85	58,341 85		
Relief of Thomas J. Jones		300 00		300 00	300 00		
Relief of legal representatives of John Hatfield, deceased.....		650 00		650 00	650 00		
Relief of Lady Franklin Bay Expedition to the Arctic Seas.....		161 00		161 00	161 00		
Relief of sufferers by loss of steamer J. Don Cameron		1,946 07		1,946 07	1,946 07		
Relief of Frances E. Stewart, administratrix of Michael S. Stewart, deceased		3,160 50		3,160 50	3,160 50		
Relief of Lizzie D. Clarke, widow of Thomas L. Clarke.....		60,000 00		60,000 00	60,000 00		
Relief of Edward Fenlon		8,627 98		8,627 98	8,627 98		
Total private relief acts	12,082 34	663,296 80		675,379 14	640,417 83		34,961 31
<i>Erection of monuments.</i>							
Erection of monumental column at Yorktown, Va.	5,176 74			5,176 74			5,176 74
Monument at Washington's headquarters, Newburg, N. Y.	24,500 00			24,500 00	500 00		24,000 00
Pedestal for statue of Rear Admiral Samuel Francis Du Pont	2 16			2 16		\$2 16	
Unveiling statue of Rear Admiral Du Pont	4 33			4 33			4 33
Pedestal for statue of James A. Garfield	30,000 00			30,000 00	17 25		29,982 75
Statue to memory of Lafayette and compatriots	50,000 00			50,000 00	2,000 00		48,000 00
Total erection of monuments	109,683 23			109,683 23	2,517 25	2 16	107,163 82

Total miscellaneous objects	1, 278, 445 96	4, 492, 150 11	\$14, 086 04	5, 784, 682 11	4, 420, 718 96	148, 228 58	1, 215, 744 57
Deduct repayments in excess of payments					14, 086 04		
Actual expenditures, miscellaneous					4, 406, 627 92		

RECAPITULATION.

Salaries, contingent expenses, and postage	\$95, 937 80	\$2, 071, 295 00	.....	\$2, 167, 232 80	\$1, 992, 469 95	\$57, 031 74	\$117, 731 11
Military establishment—Army and Military Academy	1, 684, 186 61	24, 941, 691 84	.....	26, 625, 878 45	24, 297, 500 58	798, 397 53	1, 529, 980 34
Public works	8, 905, 990 64	2, 327, 092 73	\$104, 142 84	11, 337, 226 21	6, 294, 305 43	204, 363 61	4, 734, 414 33
Miscellaneous objects	1, 278, 445 96	4, 492, 150 11	14, 086 04	5, 784, 682 11	4, 406, 627 92	148, 228 58	1, 215, 744 57
Total	11, 964, 561 01	33, 832, 229 68	118, 228 88	45, 915, 019 57	36, 990, 903 88	1, 208, 016 46	7, 597, 870 35



REPORT OF THE LIEUTENANT-GENERAL OF THE ARMY.



REPORT

OF THE

LIEUTENANT-GENERAL OF THE ARMY.

HEADQUARTERS OF THE ARMY,
Washington, October 10, 1886.

SIR: I submit herewith the annual reports of the three major-generals commanding the three military divisions into which the territory of the United States is divided for purposes of military administration, accompanied by the reports of the eight department commanders and the commanding officer district of New Mexico; also, the reports of the Adjutant-General, the Inspector-General, the Superintendent of the Military Academy, the commanding officer of the Artillery School at Fort Monroe, and the commanding officer of the Infantry and Cavalry School at Fort Leavenworth, Kans.

From these reports it will be seen that at the date of the last consolidated returns the Army consisted of—

	Officers.	Men.
General	10	.....
General staff	573	1, 212
Ten regiments of cavalry	411	6, 942
Five regiments of artillery	272	2, 473
Twenty-five regiments of infantry	836	10, 721
Indian scouts		595
Detachments—recruiting parties, &c.		2, 003
Total	2, 102	23, 946

DIVISION OF THE ATLANTIC.

Since my annual report of last year we have had the misfortune to lose Maj. Gen. Winfield Scott Hancock, who died February 9, 1886, and the Lieutenant-General performed the melancholy duty of accompanying his remains to the family vault at Norristown, Pa., February 14, 1886. He was succeeded in the command of the Division of the Atlantic by Maj. Gen. John M. Schofield.

No military operations of importance have occurred in this division during the year, but beyond the routine duties at the different garrisons there have been more or less movements of troops, occasioned by reason of fears of yellow fever at one of the Gulf posts, furnishing a light battery to the camp of the Third Corps at Gettysburg, supplying guards for the tombs of the late President Garfield and the late General Grant, and the marches necessitated by lack of facilities at some posts for long-range target practice.

General Schofield repeats the recommendations heretofore made by himself and his predecessor relative to the concentration at some suitable post of several light batteries for their better instruction, and he also calls attention to the fortification and armament of our sea-coasts, his command embracing a large portion of our coasts lying along the Atlantic Ocean.

Further small sums of money have been authorized this year for the enlargement of Fort Niagara; the reconstruction of Fort Porter, under plans and specifications already furnished, which will soon be commenced; and for the construction which is proceeding on the new post near Atlanta, Ga. When these improvements are completed there will be an appreciable advancement in the direction of quartering both officers and men that has long been needed, and it is hoped a continuation of appropriations will in a few years not only greatly add to the comfort of the troops but show good results in the line of both discipline and economy, by reason of concentration and the abandonment of some small unimportant posts which are now mainly occupied for purposes of shelter.

DIVISION OF THE MISSOURI.

In pursuance of orders from the President, Maj. Gen. Alfred H. Terry assumed command of the Division of the Missouri April 9, 1886. Its department organization remains the same as when my last report was submitted, with the exception of the transfer of the District of New Mexico to the Department of Arizona, and the substitution of Brig. Gen. George Crook in command of the Department of the Platte *vice* Howard, Brig. Gen. Thomas H. Ruger to the Department of Dakota *vice* Terry, and Brig. Gen. J. H. Potter to the Department of the Missouri *vice* Miles.

While the division has had no troubles approaching a condition of hostilities during the year, many operations of a minor nature have been rendered necessary to suppress predatory raids in Montana by Indians from one reservation directed mainly against Indians of other reservations, to protect the Indian agents from the insolence and insubordination of their charges, and to secure settlers from the lawless demands of roving bands who have been permitted, on one pretext or another, to leave their reservations.

The adjustment made with the Cheyennes and Arapahoes by the President, through the medium of the Lieutenant-General, in July, 1885, has allayed all irritation in the Indian Territory, but the troops in that region have been kept constantly employed in the prevention of unlawful settlements in the Oklahoma country and its invasion by herds of cattle. Unless some legislation is had which will specially fix the status of the Oklahoma land, I fear its many advantages in the way of beautiful landscapes and fertile soil will prove a continual temptation to an adventurous population near its border, which in a short period could make it a prosperous State.

Vague reports of difficulties north and northwest of Fort Lewis, in Southern Colorado, have necessitated the movement of troops in that direction, and the establishment of two summer camps in the Blue Mountain region have quieted all fears and satisfied the settlers, so that all complaints have now ceased.

The Indians at the Uintah and Ouray Agencies, located on the Uintah and Uncompahgre Reservations in Utah, embracing the old White River Utes (who murdered the Meeker family) and the Uncompahgres (removed there some time afterward), became very unruly during last

winter, defied the agent, and did almost as they pleased. After an investigation by an officer of the Army, at the request of the Secretary of the Interior, a command of six companies—four of infantry and two of cavalry—was established in the vicinity of the agencies for purposes of discipline and control. The selection of the site for the cantonment was left to General Crook, the junction of the Grand and Du Chesne Rivers was fixed upon, and the station temporarily named Fort Du Chesne. At this date reports indicate that the agent is now satisfied and the Indians have ceased their insolence and appear willing to behave themselves.

During the year Fort Fred Steele, in the Department of the Platte, and Fort Ellis, in the Department of Dakota, have been abandoned. In their day both of these posts played most important parts in the settlement of the West and Northwest. Their usefulness having passed away, the expense of their maintenance has been stopped by the removal of their garrisons to other points. It is my desire to persevere in this policy of abandoning small posts, and the sums of money allotted this year to Forts Russell, Riley, and Robinson and the post of San Antonio, all in the Division of the Missouri, will aid materially in carrying it out.

DIVISION OF THE PACIFIC.

Maj. Gen. O. O. Howard assumed command of the Division of the Pacific April 17, 1886, *vice* Pope, retired, and Brig. Gen. N. A. Miles assumed command of the Department of Arizona April 12, 1886, *vice* Cook, transferred to the Department of the Platte.

In the northern section of this division we have had some movements of troops arising from riotous proceedings against the Chinese. The prompt arrival of the different detachments at the points where difficulties had arisen inspiring great confidence, peace was readily preserved without the necessity of actual participation by the military in the enforcement of the law.

In the Department of Arizona hostilities against Geronimo were continued during the fall by the department commander, General Crook, but as the results were unsatisfactory, it became apparent to me in November, 1885, that quiet and peace could not be restored until the Chiricahua and Warm Springs Apaches were removed from Arizona. I communicated this impression to the Secretary of War in a personal interview, and in consequence was directed to proceed to Arizona to consult with Crook on this and kindred subjects growing out of existing hostilities. It was my idea to commence by sending immediately the thirty-three prisoners then at Fort Bowie to Fort Marion, Florida. I reached Fort Bowie on November 29, where I found General Crook and Captain Crawford, the latter in command of two hundred Indian scouts, many of whom were Chiricahuas, on the eve of starting into Mexico on an expedition against the hostiles. General Crook did not think the time for the removal opportune, and suggested that I obtain Captain Crawford's views. Crawford coincided with Crook, and stated that the removal might affect the conduct of the Indian scouts just going out, in whom both seemed to have great confidence, and in deference to their opinions I deemed it best to await a more advantageous time for the accomplishment of this purpose.

During the winter operations were made principally by Indian scouts under the command of Capt. Emmet Crawford, Third Cavalry, and Capt. Wirt Davis, Fourth Cavalry. The former came upon the Indians in camp in Mexico, January 10; surprised and routed them without loss

to his own troops and no loss to the Indians except their camp equipage, horses, and camp plunder. While occupying the hostile camp negotiations were opened with the hostiles, at their solicitation, with a view to their surrender; but unfortunately Captain Crawford's camp was stolen upon and attacked the next morning by irregular Mexican troops, who claimed to have been seeking the camp of the hostile Indians. In the engagement which ensued Captain Crawford was mortally wounded; three of his men wounded; the Mexicans lost their leader (killed) and four or five men killed and wounded. The loss of Captain Crawford was much to be regretted, as he would, in my opinion, have at that time terminated the cruel and bloody atrocities which continued thereafter for many months. After Captain Crawford's death, Lieut. Marion P. Maus, First Infantry, came in command and continued the negotiations, which resulted, not in the surrender of the Indians, but in a promise on the part of Geronimo that he would go to a point near the boundary line to meet General Crook. This officer met him about twenty-five miles below San Bernardino, Mexico, and exacted a qualified surrender, which was not approved by the President. While *en route* to Fort Bowie the Indians, suspicious of treachery, marched in skirmish order so as to prevent any considerable number of their party from being entrapped; but the night succeeding the first day's march Geronimo became alarmed from idle stories and escaped with twenty of his best men and thirteen women. The balance of his band continued on to Bowie, after which they were sent to Fort Marion, Florida, with the thirty-three previously captured. The understanding when Geronimo and his followers started in to Bowie was, that if they surrendered their lives would be spared and they would be located in some distant part of the country. Fort Marion was selected as the best place to secure these blood-thirsty savages (whose lives were spared not from any consideration for *them* but as an inducement for the balance of the hostiles to surrender), so that honest and industrious white citizens and their families might be protected and trade and commerce restored to the Territories of Arizona and New Mexico. They could not be put at any military post west of the Missouri River, because the people in the vicinity would not tolerate them, and as the law excludes them from the Indian Territory, removal to that section was out of the question.

After Captain Crawford's last engagement it became a belief in my mind that the Indian scouts could not be wholly depended upon to fight and kill their own people. I think they were faithful so far as to try to capture or to induce the surrender of the hostiles, but they had no wish to kill their own kindred. That this sentiment was reciprocal was demonstrated by the Indian engagement referred to and others that had occurred previously. General Crook seemed, however, wedded to the policy of operating almost exclusively with Indian scouts, and as his experience was of great weight his policy could not well be changed without his removal to another field. To relieve the embarrassment he at once requested such a course, and as at about the time of the surrender and escape of a part of Geronimo's band a change of the geographical commands was necessitated by the death of General Hancock and the retirement of General Pope, General Crook was sent to the Department of the Platte, and General Miles, on my recommendation, assigned to the Department of Arizona, the latter's instructions being as follows:

WASHINGTON, April 3, 1886.

e Lieutenant-General directs that on assuming command of the Department of Arizona, you fix your headquarters temporarily at or near some point on the Southern Pacific Railroad. He directs that the greatest care be taken to prevent the spread of

hostilities among the friendly Indians in your command, and that the most vigorous operations looking to the destruction or capture of the hostiles be ceaselessly carried on. He does not wish to embarrass you by undertaking at this distance to give specific instructions in relation to operations against the hostiles, but it is deemed advisable to suggest the necessity of making active and prominent use of the Regular troops of your command. It is desired that you proceed to Arizona as soon as practicable.

R. C. DRUM,
Adjutant-General.

General NELSON A. MILES,
Fort Leavenworth, Kans.

General Miles went to work with commendable zeal. His troops followed up the hostiles with vigorous energy, broke up their camps by attack four or five times, and gave them no rest until they surrendered on September 4, under circumstances and conditions, however, that should not, in my judgment, permit their being turned over to the civil authorities for punishment, as was intended by the President. On September 8 they were started by General Miles to Fort Marion, Florida, without authority, but at a later date stopped at San Antonio till their final disposition could be decided upon.

Previous to the surrender, and early in July, General Miles had visited Fort Apache, near which were located the peaceable Chiricahua and Warm Springs Apaches, some of whom had been General Crook's scouts, and many of whom, before serving in that capacity, had committed the most brutal murders. On July 3 Miles telegraphed that there were, strong military reasons for the removal of these Indians from Arizona and asked authority to send a few of the tribe to Washington with reference to another location. From this I judged the time had about arrived for the forcible removal of all the Chiricahua and Warm Springs Apaches to Florida, in accordance with the suggestions I had made before visiting General Crook in November, 1885. I consequently approved General Miles's request, and, the Secretary of War having authorized it, I directed the former to send ten of the Indians to Washington under charge of an officer, with instructions to report them to the Secretary of the Interior. A delegation of leading men was speedily started and shortly after arrived in charge of Captain Dorst.

On the 7th of July General Miles forwarded a communication giving his views relative to the subjugation of the hostiles and the control of the Apaches, suggesting the advisability of moving the four hundred and forty men, women, and children on the reservation to the Indian Territory, &c., on which I indorsed, July 30, as my recommendation, the following:

Respectfully submitted to the Secretary of War. There are now on the reservation near Fort Apache seventy-one Chiricahua and Warm Springs adult male Indians. These are exclusive of those in this city. It is my belief that if the delegation which is now here goes back to the reservation without having received what they may deem the most satisfactory promises on the part of the Government a large number of those that are now peaceable will endeavor to join Geronimo. I therefore recommend that authority be granted me to direct General Miles to immediately arrest all the male Indians now on the Chiricahua Reservation, near Fort Apache, and send them as prisoners to Fort Marion, Florida; that the delegation now here be sent there also, and that they be held at that point as prisoners of war until the final solution of the Geronimo troubles.

The President called together the Secretary of War, the Secretary of the Interior, and myself, and after discussing the question the President directed me to send a telegram to General Miles asking him what he thought of the proposition to forcibly arrest all on the reservation and send them to Fort Marion, where they could be joined by the party then

in Washington, to which he replied that there would be some advantages, but that some serious objections occurred to him which he would explain fully by letter. The objections contained in his letter were that the delegation went to Washington by authority, with a view of making some permanent arrangement for their future, and that it might be charged the Government had taken advantage of them; that it would be known to all other Indians in the Southwest, and, in future, they might hesitate about sending delegations to Washington, and that it would necessitate a war of extermination against the hostiles then in Old Mexico, in which all would have to be killed. To me the objections of General Miles did not seem sufficiently weighty in the face of the many cogent reasons existing for removal—if removed at all—to some point east of the Missouri River, and I am pleased to say that the President finally authorized them to be sent to Fort Marion, after General Miles, on August 20, had reported that Colonel Wade, commanding Fort Apache, was prepared to accomplish the work.

On the 25th of August I again informed General Miles, in answer to a telegram he had sent to the Interior Department, that no proposition looking to the location of the Chiricahua and Warm Springs Indians west of the Missouri River could be entertained, to which he replied with further recommendations as to establishing them at Fort Union, New Mexico. This was forwarded to the President, who adhered, however, to the decision he had already made, and in consequence the four hundred and forty men, women, and children then at Fort Apache were started for Fort Marion, Florida, where they arrived on September 21.

THE ADJUTANT-GENERAL'S REPORT

shows the distribution of troops, statement of casualties during the year, enlistments and re-enlistments, number of enlisted men drawing increased pay under the act of August 4, 1854, and the number of men who will become entitled to increased pay under the act of May 15, 1872.

It is gratifying to know that there is a marked decrease in the number of desertions from the Army since my last report. The percentage in 1884 to the legal strength of the Army was 15, in 1885 11.7, and during the past year 8.3. The great decrease since 1884 is due, no doubt, to the improvement of administration and to the beneficent legislation which provides for honorable retirement of enlisted men after long and faithful service. From the fact that a considerable number of offenders belong to a class that may be termed professionals, the evil can only be wholly eradicated by legislation which will empower us to indelibly mark with India ink every man convicted of desertion by a court-martial. Fear of detection would prevent such criminals from again offering themselves for enlistment, and would, in my opinion, terminate forever the repeated desertions that are frequently practiced by vicious and bad characters who appear lost to all sense of obligation, and commit the crime for pleasure or the convenience of getting from one place to another.

The recruiting of the Army has been carried on under practically the same system as has obtained for many years, except that the recruits are kept at the general depots for a longer period than formerly. This has proven advantageous to the recruits and the Government in many ways, and the improved quarters and better rations and clothing that are now provided for the enlisted soldier tend greatly to improve and elevate the tone of the service.

THE INSPECTOR-GENERAL'S REPORT

indicates that the Army is in a very healthy and gratifying condition, and it contains many recommendations deserving consideration. The discipline is generally excellent. But few officers have been tried by courts-martial during the year, and I think I may safely state there has not been a period during the last twenty-five years when so little necessity has existed for the correction of those holding commissions.

Many officers are becoming disabled, however, by reason of long service on the frontier and from wounds received or disease contracted during the war of the rebellion. While the disabled are being transferred to the retired list as fast as its limits will permit, some relief could be extended if Congress would open that list to the extent of embracing those who are now excluded from it for want of vacancies. This would give a certain degree of promotion, and if we could get the infantry regiments increased to twelve companies, as proposed by the Manderson bill, and the increase of five thousand men reported favorably by the Senate Military Committee last winter, a state of efficiency and usefulness would be reached which would enable us to creditably perform such service as the country might demand.

MILITARY ACADEMY—ARTILLERY AND INFANTRY AND CAVALRY SCHOOLS.

The reports of the Superintendent of the Military Academy, the commanding officer of the Artillery School, and the commanding officer of the Infantry and Cavalry School, show the constant care that is being exercised for the maintenance of a high standard of military education among our officers. The Military Academy and the Artillery School have been in existence for so long a period, and the general principles on which they are based have proven so satisfactory, that there are no marked recommendations made in the report from either which I wish to bring before you now, though many minor points are touched upon which deserve consideration. The commandant of the Infantry and Cavalry School suggests a number of improvements to keep up with the spirit of the age, but, as that establishment is yet in its infancy, it is thought best to move slowly in the adoption of untried methods there until the institution becomes somewhat more crystallized.

RIFLE PRACTICE.

The instruction of the Army in the use of the rifle or carbine with which the men are armed has been thoroughly prosecuted during the year, and the returns from each department, as well as the results of the regular competitions now just closing, exhibit a decided advance in the proficiency of the Army in rifle firing.

In my previous report I called attention to the great relative importance of the company skirmish practice, where the targets are figures simulating the appearance of a line of hostile skirmishers. This practice is the natural sequence to the known distance-firing, and possesses great practical advantages; it not only perfects the fire-discipline of the company and the ability of its officers to control in direction and intensity the fire of their men under conditions as close as peace permits to those which might exist in war, but it also presents to the eye of the soldier an object which bears a fair resemblance to the appearance of an enemy in battle, and accustoms him as far as possible to aiming and

firing at men. The lack of appropriate ground for these exercises has in some cases prevented their proper prosecution, but as their importance is becoming better recognized these obstacles are gradually being overcome, until, in the near future, I anticipate that many of the soldiers will become expert skirmishers, and the effective fire of the mass of the Army will have greatly increased in value.

LANDS IN SEVERALTY TO INDIANS.

As the Army is necessarily deeply interested in the settlement of the Indians in permanent abodes, I again beg leave to submit my recommendations of last year on this subject.

In my annual report for 1885 I recommended that each Indian family be given and located upon the 320 acres now provided for them by law in case of actual settlement; that the Government then condemn the remainder of each reservation and buy it for \$1.25 per acre, and with the proceeds purchase Government bonds, to be held in trust by the Interior Department, giving to the Indians each year the interest on the bonds for their support. I cited, in illustration of what would be the practical workings of this suggestion, the case of the Crows, the Cheyennes, the Arapahoes, and the Utes, but the limits of my report did not permit a full elucidation of the advantages that would accrue to the Indian, nor even an allusion to the large amount of land now lying idle that would thereby be opened to settlement, and increase by so much the material prosperity of the nation.

When it is attempted to deal with this subject more in detail, a difficulty is at once encountered, in that neither the actual area of the various reservations has been accurately determined nor the numbers of the Indians occupying them known within more than approximate limits. It will, therefore, not be possible to show the exact workings of the method proposed, but only a general summary covering the cases of the larger reservations in each Territory, and the most populous of the different tribes.

Since the appropriations for the support of the Indians are not in every case made specifically for those upon any particular reservation, but rather collectively for those inhabiting some State or Territory, in making comparisons with the sum now required for the subsistence of the Indians and the annuities allowed them by treaty, the aggregate for a Territory, or several Territories, has necessarily been considered rather than for each tribe or reservation.

In Dakota the principal reservations are the Fort Berthold and those inhabited by the various bands of Sioux. The Fort Berthold Reservation, with an area of over 2,900,000 acres, has a population of 1,300 people; the others—the Crow Creek, Old Winnebago, and Sioux—an area of nearly 22,250,000 acres, and a population of about 25,800. Carrying out the proposals of my report would, in the former case, afford an annual income of over \$140,000, and in the latter case a surplus unoccupied by the Indians of over 20,500,000 acres (over 32,000 square miles), or an extent of territory equal to the combined area of the States of New Hampshire, Vermont, Massachusetts, and Connecticut, the proceeds of which at 4 per cent. per annum would yield an interest of over \$1,000,000. With two of the smaller reservations—the Devil's Lake and South Mountain, area 276,480 acres, population over 1,800—nearly half of the land would be required by the Indians; in this case, then, the income from the surplus would be small, being a little less than \$8,000 per annum.

In Montana the Blackfeet Reservation contains over 21,500,000 acres, and a population of less than 7,000 Indians; the surplus land, equal to the area of the State of Maine, would then return an income of \$1,060,000. The Crow Reservation mentioned in my report could, in a similar manner, be made to produce an annual sum of \$223,000.

Considering all the Indians and reservations in the Territories of Dakota and Montana, we have an aggregate area of over 54,500,000 acres, and a population of less than 45,000. The surplus area of nearly 81,000 square miles (almost equal to the entire State of Kansas) would produce an annual interest of over \$2,500,000. The appropriations for the fiscal year ending June 30, 1886, for fulfilling treaties with these tribes and for their subsistence and civilization and the pay of the employes incident to such undertaking, amount to about \$100,000 less than this sum.

In Wyoming the Shoshones are located upon the Wind River Reservation. One hundred and seventeen thousand dollars per year could be derived from their surplus land.

In Idaho the Fort Hall Reservation, occupied by the Bannocks and Shoshones, would in the same way produce each year \$55,000; the Cœur d'Alene Reservation, \$28,000. In the two Territories of Wyoming and Idaho the total area of all the reservations is nearly 5,000,000 acres; the total population nearly 6,000. An area of nearly 7,200 square miles, almost equal to the State of New Jersey, would not be required for the Indians, and an income would be yielded of about \$235,000—a sum more than \$100,000 in excess of the appropriation for the last fiscal year.

In Oregon the most populous reservation is the Klamath, with over 1,000,000 acres, but less than 1,000 inhabitants. It would yield nearly \$50,000 a year.

In Washington Territory the Yakamas, about 3,200 in number, occupy the reservation of 800,000 acres of the same name. Here the surplus land would bear but \$30,000 a year. In Oregon and in this Territory the reservations, with a total population of about 16,000, embrace 8,400,000 acres, or about seven and one-third million acres more than would be required by them under the plan proposed, which would produce per annum \$370,000, or about \$300,000 more than was appropriated last year for these Indians.

The different bands of Utes in Utah and Colorado number about 3,650, and their reservations include over 5,000,000 acres, of which the surplus portion would produce a yearly income of \$240,000, or about \$175,000 more than was disbursed last year for their benefit.

In New Mexico the Navajoes, on the reservation of the same name, have now over 8,000,000 acres for a population of 23,000 people. Here the surplus land would yield over \$330,000 a year.

For the surplus lands of the Mescalero Apache Reservation the income would be nearly \$20,000.

In Arizona the principal reservation is the White Mountain, with the agency at San Carlos. It embraces more than two and one-half million acres. Considerable uncertainty exists as to its population, but it is probably about 3,000 in the vicinity of the agency, and 2,000 more—making 5,000 in all who are now engaged in farming and in efforts to make themselves self-supporting. The latter would, however, be entitled to all the benefits obtained by the agency Indians in any scheme looking to the promotion of their general prosperity. Carrying out the proposals of my report would leave a balance of considerably over 2,000,000 acres, with, according to the plan advocated, about \$110,000 per year.

Considering collectively the Indians of New Mexico and Arizona, we have reservations embracing sixteen and one-half million acres, inhabited by nearly 53,000 people. The surplus land would include about thirteen and three-fourths millions of acres, about equal to half the State of Kentucky, which would yield, according to the plan proposed, nearly \$640,000—a sum greater by \$350,000 than that appropriated for the last fiscal year for the support of these Indians.

In the Indian Territory the Cheyenne and Arapahoe, the Kiowa and Comanche, and the Wachita Reservations embrace over 8,000,000 acres. The population is about 7,750. The income from the surplus land (\$375,000) would come within \$75,000 of equaling the amount appropriated. Considering all the Indians in this Territory, we have a total of nearly 80,000, an extent of reservation of thirty-one and one-half millions of acres, excluding the Oklahoma country, which would produce an annual income of about one and one-third million dollars.

The Indian reservations of the United States contain about 200,000 square miles, and their population is about 260,000. Twenty-six thousand square miles would locate each family upon a half section of land, leaving a surplus of about 170,000 square miles, which, according to the plan I have proposed, would produce annually \$4,480,000. This amount exceeds by about \$660,000 the entire sum appropriated for the payment of their annuities and for their subsistence and civilization.

The policy advocated in my report would be most advantageously applied gradually, the general government of the Indians being continued according to the methods now in vogue, or such improvement of them as time and experience may suggest. The ultimate development of the suggested policy would, as the Indians advance in civilization and intelligence, result in the return to them of the principal derived from the sale of their lands, which, until such measures were authorized by act of Congress, would be held as a trust for their benefit, and the income applied to their support.

Very respectfully, your obedient servant,

P. H. SHERIDAN,

Lieutenant-General, Commanding.

Hon. WILLIAM C. ENDICOTT,

Secretary of War.

REPORTS

TO

THE LIEUTENANT-GENERAL OF THE ARMY.

REPORT OF THE ADJUTANT-GENERAL.

HEADQUARTERS OF THE ARMY,
ADJUTANT-GENERAL'S OFFICE,
Washington, October 9, 1886.

Lieutenant-General PHILIP H. SHERIDAN,
U. S. Army:

GENERAL: Pursuant to your instructions, I have the honor to submit the annual returns of the Army:

A.—Organization of the Regular Army.

B.—Return showing actual strength of the Regular Army.

C.—Distribution of troops in the Division of the Atlantic.

D.—Distribution of troops in the Departments of the Missouri, Texas, the Platte, and Dakota—Division of the Missouri.

E.—Distribution of troops in the Departments of California, the Columbia, and Arizona—Division of the Pacific.

F.—Geographical divisions, departments and posts, with distribution of troops, post-offices, telegraph stations, and nearest railroad stations or boat landings.

G.—Statement of casualties during the fiscal year ending June 30, 1886:

H.—Statement of enlistments and re-enlistments in the Army during the fiscal year ending June 30, 1886.

The number of enlisted men now in service who are drawing increased pay under the act of Congress of August 4, 1854, is as follows:

Five years' continuous service	3,497
Ten years' continuous service	1,619
Fifteen years' continuous service	1,183
Twenty years' continuous service	240
Twenty-five years' continuous service	71
Thirty years' continuous service	19
Thirty-five years' continuous service	13
Total	6,642

The number of those who will become entitled to increased pay under act of Congress of May 15, 1872, during the fiscal year ending June 30, 1886, is:

Re-enlisted pay	591
One dollar per month for third year of service	3,935
Two dollars per month for fourth year of service	3,879
Three dollars per month for fifth year of service	2,938
Total	11,343

and the number of enlisted men in service whose terms will expire during the same period is 3,413.

The officers of the Adjutant-General's Department are properly assigned, and in the discharge of their appropriate duties.

DESERTION.

It is very gratifying to me to report a marked decrease in the number of desertions from the Army during the past year. The percentage of desertions to the legal strength of the Army, which, in 1884, was 15, was reduced in 1885 to 11.7, and during the past year has been further reduced to 8.3. While part of this result is due to the increasing appreciation on the part of recruiting officers of the importance of the interests confided to their care, I have no doubt that this great decrease since 1884, in which year beneficent legislation provided an honorable retirement to men after thirty years' faithful service, is not a mere coincidence, but evidences that the Army at large recognizes and appreciates the active interest in their behalf by the constituted military authorities and by Congress. That this is not a mere conjecture, but a real fact, is proved by the records of the Army, which show 1,300 re-enlistments in 1884, 1,731 in 1885, and 2,121 in 1886. The total number of men in the Army drawing increased pay for service ranging from five to thirty years and upwards has also steadily increased. The number of these men was 6,253 in 1884, 6,515 in 1885, and during the past year reached 6,642, or nearly one-third of the actual strength of the Army.

While the crime of desertion can never, perhaps, be absolutely eliminated, I am convinced that the adoption of a carefully considered code of punishments for all military offenses, the establishment at posts of a light prison for the confinement of minor offenders, &c., would greatly tend to still further lessen the number of desertions.

EDUCATION IN THE ARMY.

An examination of the official reports made this year on the subject of Army schools further strengthens my opinion that the present voluntary school system in the Army is a failure, and from inherent radical defects will remain so. Those of the men who are the most ignorant, and, therefore, in the greatest need of instruction, are the most averse to attend school. The attendance of this class of men should be made compulsory.

There is no question that military schools properly organized and efficiently taught would prove of very great benefit to the rank and file of the Army, but among the necessary requisites for successful results instruction must be made a military duty, and the hours of attendance should be during the day. The course of studies should be carefully prepared and embrace such subjects of general and special nature as would be of positive and practical advantage to soldiers. Teachers should have recognized rank and position, and their selection carefully made after an examination, which would develop not only the knowledge they possess, but also their special capacity and aptitude for imparting it—a much rarer qualification than is generally supposed.

RECRUITING SERVICE.

During the past year the superintendency of the general recruiting service has been maintained at New York City; the mounted superintendency, which up to June 30, 1886, had been established in the city

of Saint Louis, Mo., was at that date transferred to the cavalry depot at Jefferson Barracks, Mo. Under the provisions of General Orders No. 39, dated June 22, 1886, there is to be but one superintendent of the recruiting service after October 1, 1886, with headquarters at New York City, whose supervision will include the rendezvous of the mounted as well as those of the general service.

On October 1, 1885, recruiting rendezvous were in operation at the following points: Four in New York City; two in each of the cities of Philadelphia, Baltimore, Chicago, Cincinnati, and Saint Louis; and one each at Boston, Albany, Buffalo, Harrisburg, Pittsburg, Cleveland, Detroit, Denver, Geneva, N. Y., and Washington. The rendezvous at Geneva, N. Y., was closed December 31, 1885, and one was opened at Nashville February 4, 1886.

In cities where only one rendezvous has been in operation the officers in charge, whenever the necessities of the service required it, have made enlistments for both the general and the mounted service.

In addition to the operations of the general and mounted recruiting services, recruiting has been carried on as heretofore—without expense to the recruiting fund—in the departments constituting the divisions of the Missouri and the Pacific, by officers stationed at military posts and under the supervision of the assistant adjutant-general at the headquarters of each department; and, in the division of the Atlantic, at the several posts by recruiting officers designated by their respective regimental commanders.

Recruiting for the Engineer battalion has been in like manner carried on by officers of the battalion at their respective posts, under the supervision of the battalion commander; and, as occasion required, suitable men have been enlisted at one of the rendezvous in New York City for assignment to that command.

The total number of enlistments and re-enlistments in the Army (exclusive of the Signal Corps) for the year ending June 30, 1886, was 6,941, classified as follows:

For the general and mounted services.....	3,712
For the departmental recruiting service.....	1,540
For the Engineer battalion	75
	<hr/> 5,327
For special regiments, detachments, &c.....	1,614

Of the 5,327 accepted recruits, 3,306 were native born and 2,021 of foreign birth; 4,847 were white and 480 colored. Eighteen thousand and ninety-four applicants for enlistment were rejected by recruiting officers on account of physical or mental disqualifications, indicating that the public interests were carefully guarded by the officers charged with the responsible duty of recruiting. This care and vigilance on their part is emphasized by the fact that while 29 per cent. of the total number of applicants for enlistment was accepted in 1884, the percentage of acceptance was reduced the following year to 27.7, and during the past year did not quite reach 23 per cent.

All newly-enlisted recruits of the general and mounted services have been retained at least three months at the general depots for instruction before assignment to regiments, and it is believed this has been an important factor in reducing the number of desertions during the past two years.

Respectfully submitted,

B. O. DRUM,
Adjutant General,

A.—ORGANIZATION OF THE ARMY OF THE UNITED STATES, 1886.

[illegible]

(a) The military secretary and the aides-de-camp, belonging also to corps or regiments in the strength of which they are included, are excluded as staff officers from the "total commissioned" and "aggregate."
(b) The adjutant and quartermaster of the Battalion of Engineers, being included in the strength of their corps, are excluded as staff officers from the "total commissioned" and "aggregate."
(c) The several acts of Congress reorganizing the staff corps provide that no officer shall be reduced in rank or mustered out of service by reason of any provisions of said acts. The number allowed by law is given in the above table, and there are in excess of the authorized number as follows: Five military storekeepers in the Quartermaster's Department; three medical storekeepers; and five ordnance storekeepers.
(d) The act of July 5, 1884, making appropriations for the support of the Army for the fiscal year ending June 30, 1885, and for other purposes, provides that no more appointments of paymasters shall be made in the Pay Department until the number shall be reduced below twenty-nine majors, and hereafter the number of officers in the Pay Department shall not exceed thirty-five. There are now in service as follows: One brigadier-general, two colonels, three lieutenant-colonels, and forty-three majors.
(e) Assistant surgeons have the rank, pay, and emoluments of first lieutenant of cavalry for the first five years' service, and the rank, pay, and emoluments of captain after five years' service; and a lieutenant of Engineers and Ordnance, having served fourteen years continuously as lieutenant, is entitled to promotion to the rank of captain, but such promotion is not to increase the whole number of officers in either of said corps.
(f) The act of May 17, 1886, regulating the promotion of graduates of the United States Military Academy, authorizes their promotion as additional second lieutenants in any arm or corps of the Army, if there be no vacancy for second lieutenant, until a vacancy shall occur.
(g) The Signal Corps is provided for in the act of August 4, 1886, making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1887, and for other purposes, and the act of July 29, 1886, provides for the enlistment of one hundred and twenty-five general-service clerks: Ninety of class one, with the pay of one thousand dollars each per annum; twenty-five of class two, with one thousand one hundred dollars each per annum; and ten of class three, with one thousand two hundred dollars each per annum; and forty-five general-service messengers, with sixty dollars each per month. This number not to be computed as a part of the number (25,000) at which the Army is now limited by law. The signal detachment and the general-service clerks and messengers are excluded from the aggregate of "total enlisted."

R. C. DRUM,
Adjutant-General.

B.—GENERAL RETURN OR EXHIBIT OF THE ACTUAL STRENGTH OF THE ARMY OF THE UNITED STATES JUNE, 1886

[illegible]

(a) The military secretary and the aides-de-camp belonging also to corps or regiments, in the strength of which they are included, are excluded as staff officers from the "total commissioned" and "aggregate,"

(b) The adjutant and quartermaster of the Battalion of Engineers, being included in the strength of their corps, are excluded as staff officers from the "total commissioned" and "aggregate."

(c) See notes c, d, e, f, and g on accompanying organization table, marked "A."

ADJUTANT-GENERAL'S OFFICE,
Washington, D. C., October 9, 1886.

C.—Position and distribution of troops in the Division of the Atlantic, commanded by
from the latest returns on file in

POSTS.	SITUATIONS.	COMMANDING OFFICER.	Number of companies.	GARRISONS.	PRESENT.					
				Regiments.	General officers.	Military secretary.	Aides-de-camp.	Adjutant-General's Department.	Inspectors general.	Judge-Advocate-General's Dept.
				Divis'n staff.	1		2	1	1	1
Fort Adams, R. I...	Near Newport	Col. C. L. Best, 4th Art.	5	4th Art.						
Fort Warren, Mass.	In Boston Harbor.....	Maj. L. L. Livingston, 4th Art.	2	4th Art.						
Fort Preble, Me....	Near Portland	Maj. W. M. Graham, 4th Art.	1	4th Art.						
Fort Trumbull, Conn.	New London.....	Lt. Col. John Mendenhall, 4th Art.	2	4th Art.						
Fort Columbus, N. Y.	Governor's Island	Maj. R. H. Jackson, 5th Art.	3	5th Art.						
Fort Hamilton, N. Y.	New York Harbor....	Col. John Hamilton, 5th Art.	4	5th Art.						
Fort Wadsworth, N. Y.	.....do	Lt. Col. H. W. Closson, 5th Art.	1	5th Art.						
Fort Schuyler, N. Y.	Throg's Neck	Maj. A. C. Wildrick, 5th Art.	2	5th Art.						
Fort Niagara, N. Y.	Youngstown... ..	Maj. W. H. Penrose, 12th Inf.	2	12th Inf.						
Fort Ontario, N. Y.	Oswego	Capt. E. C. Woodruff, 12th Inf.	1	12th Inf.						
Fort Porter, N. Y..	Buffalo	Maj. Samuel Ovenshine, 23d Inf.	2	23d Inf.						
Madison Barracks, N. Y.	Sackett's Harbor	Col. O. B. Wilcox, 12th Inf.	6	12th Inf.						
Plattsburg Barracks, N. Y.	Plattsburg.....	Lt. Col. R. S. La Motte, 12th Inf.	1	12th Inf.						
Fort Brady, Mich..	Sault Ste. Marie	Capt. James Henton, 23d Inf.	2	23d Inf.						
Fort Wayne, Mich.	Detroit	Col. H. M. Black, 23d Inf.	4	23d Inf.						
Fort Mackinac, Mich.	Michilimackinac Isl. and	Capt. G. A. Goodale, 23d Inf.	2	23d Inf.						
Fort McHenry, Md.	Baltimore.....	Maj. Richard Lodor, 3d Art.	3	3d Art.						
Washington Barracks, D. C.	Washington	Col. H. G. Gibson, 3d Art.	6	3d Art.						
Fort Monroe, Va...	.....	Col. John Tidball, 1st Art.	5	1st, 2d, 3d, 4th, and 5th A.						
Saint Francis Barracks, Fla.	Saint Augustine.....	Lt. Col. L. L. Langdon, 2d Art.	2	2d Art.						
Little Rock Barracks, Ark.	Little Rock.....	Maj. F. L. Guenther, 2d Art.	2	2d Art.						
Mount Vernon Barracks, Ala.	Mount Vernon.....	Maj. William Sinclair, 2d Art.	2	2d Art.						
Jackson Barracks, La.	New Orleans.....	Maj. C. B. Throckmorton, 2d Art.	2	2d Art.						
Newport Barracks, Ky.	Newport.....	Capt. J. L. Tiernon, 2d Art.	1	2d Art.						
Camp Hancock, Ga.	Atlanta.....	Capt. J. E. Wilson, 2d Art.	2	2d Art.						
Total Division of the Atlantic.....				65	1		2	1	1	1

Maj. Gen. John M. Schofield, headquarters Governor's Island, New York Harbor, taken the Adjutant-General's Office, 1886.

PRESENT.																	ABSENT.							AGGREGATE.					
Quartermaster's Department. Subsistence Department. Medical Department. Pay Department. Corps of Engineers. Ordnance Department. Post chaplains. Military storekeepers. Colonels. Lieutenant-colonels. Majors. Captains. Regimental chaplains. Regimental adjutants. Regimental quartermasters. Subalterns. Enlisted men. Total commissioned. Aggregate. General and staff officers. Field and regimental staff officers. Captains. Subalterns. Enlisted men. Total commissioned. Aggregate.																	General and staff officers. Field and regimental staff officers. Captains. Subalterns. Enlisted men. Total commissioned. Aggregate.							Commissioned officers. Enlisted men. Aggregate.					
6	6	1	9					1									16	28	44								28	16	44
		2									5						220	20	240				5	4	5	9	25	224	249
		1								1	2						71	7	78				3		3	3	10	71	81
			1													3	35	5	40		1		1	1	2	6	36	42	
				1							2					4	68	8	76			2		2	2	10	68	78	
					2							3				7	105	13	118			2		2	2	15	105	120	
													1	1		7	190	17	207				5	1	5	6	22	191	213
																3	39	6	45							6	39	45	
												1				4	75	8	83			2		2	2	10	75	85	
												2				4	72	8	80							8	72	80	
																2	41	4	45							4	41	45	
																4	76	8	84							8	76	84	
												6	1	1	10	231	21	252				2		2	2	23	231	254	
																1	39	4	43				1		1	5	39	44	
												2				2	65	5	70				2		2	7	65	72	
												4	1	1	8	173	17	190								17	173	190	
																3	68	5	73				1		1	6	68	74	
																4	107	8	115			1	2		3	3	11	107	118
												6	1	1	16	267	28	295		2		2		4	4	32	267	299	
1	1	2														22	216	34	250								34	216	250
			1									1			3	92	7	99		2	1	3		6	6	13	92	105	
												2			5	106	9	115				1		1	1	10	106	116	
																4	54	8	62	1		2		3	3	11	54	65	
																3	74	7	81				3		3	10	74	84	
																2	69	4	73				1		1	5	69	74	
																4	70	6	76				2		2	8	70	78	
7	7	31	9					6	4	14	62		5	6	138	2,639	295	2,934	1	4	3	41	6	49	55	344	2,645	2,989	

D.—Position and distribution of troops in the Division of the Missouri, commanded by
in the Adjutant.

POSTS.	SITUATIONS.	COMMANDING OFFICER.	Number of companies.	GARRISONS.	PRESENT.				
				Regiments.	General officers.	Military secretary.	Aides-de-camp.	Adjutant-General's Department.	Inspectors-general.
									Judges-Advocate-General's Dept.
DEPARTMENT OF THE PLATTE.				Divis'n staff	1	..	3	2	1 1
Headquarters	Omaha, Nebr	Brig. Gen. George Crook.	...	Department staff.	1	..	1	1	..
Fort Omaha, Nebr..	Near Omaha	Col. Frank Wheaton, 2d Inf.	7	2d Inf.					
Fort Sidney, Nebr..	Near Sidney Station ..	Col. H. A. Morrow, 21st Inf.	4	21st Inf.					
Fort Niobrara, Nebr	Near Valentine	Lt. Col. J. S. Brisbin, 9th Cav.	5	9th Cav. and 2d Inf.					
Fort Robinson, Nebr	25 miles west of Chadron.	Lt. Col. J. S. Fletcher, jr., 2d Inf.	4	9th Cav. and 2d Inf.					
Fort Douglas, Utah.	Near Salt Lake City ..	Lt. Col. N. W. Osborne, 6th Inf.	9	5th Art. and 6th Inf.					
Fort Du Cheane, Utah.	Near junction of Du Cheane and Uintah Rivers.	Maj. F. W. Benteen, 9th Cav.	6	9th Cav. and 21st Inf.					
Fort Bridger, Wyo.	10 miles from Carter's Station.	Capt. H. S. Howe, 17th Inf.	3	17th and 21st Inf.					
Fort Laramie, Wyo	80 miles north of Cheyenne.	Col. C. H. Merriam, 7th Inf.	6	7th Inf.					
Fort McKinney, Wyo.	On Clear Fork Creek ..	Col. Edward Hatch, 9th Cav.	3	9th Cav.					
Fort D. A. Russell, Wyo.	Near Cheyenne	Col. Alexander Chambers, 17th Inf.	8	17th Inf.					
Fort Washakie, Wyo.	Near Shoshone Agency.	Maj. A. T. Smith, 7th Inf.	3	9th Cav. and 7th Inf.					
Camp Medicine Butte, Wyo.	Near Evanston	Capt. C. H. Greene, 17th Inf.	1	17th Inf.					
Camp Pilot Butte, Wyo.	Near Rock Springs ...	Capt. T. S. Kirtland, 7th Inf.	2	7th Inf.					
Total			61		1	..	1	1	..
DEPARTMENT OF DAKOTA.									
Headquarters	Fort Snelling, Minn...	Brig. Gen. T. H. Ruger.	...	Department staff.	1	..	1	1	1
Fort Snelling, Minn.	5 miles above Saint Paul.	Lt. Col. J. J. Van Horn, 25th Inf.	5	4th Art. and 25th Inf.					
Fort Abraham Lincoln, Dak.	Near Bismarck	Lt. Col. E. F. Townsends, 11th Inf.	1	5th Inf.					
Fort Bennett, Dak..	28 miles northwest of Pierre.	Capt. W. N. Sage, 11th Inf.	1	11th Inf.					
Fort Buford, Dak...	75 miles north of Glendive, Mont.	Col. J. N. G. Whistler, 15th Inf.	6	7th Cav. and 15th Inf.					
Fort Meade, Dak...	14 miles from Deadwood.	Col. J. W. Forsyth, 7th Cav.	10	7th Cav. and 25th Inf.					
Fort Pembina, Dak.	Near Pembina	Capt. C. M. De Lany, 15th Inf.	2	15th Inf.					
Fort Randall, Dak..	45 miles from Springfield.	Lt. Col. R. F. O'Beirne, 15th Inf.	4	15th Inf.					
Fort Sisseton, Dak.	23 miles from Webster	Maj. Frederick Mears, 25th Inf.	2	15th Inf.					
Fort Sully, Dak....	25 miles north of Pierre	Col. R. I. Dodge, 11th Inf.	4	11th Inf.					
Fort Totten, Dak...	At Devil's Lake	Maj. J. M. Bapon, 7th Cav.	3	7th Cav. and 5th Inf.					
Fort Yates, Dak....	60 miles south of Bismarck.	Maj. J. H. Page, 11th Inf.	6	7th Cav. and 11th Inf.					
Fort Assiniboine, Mont.	196 miles northeast of Helena.	Col. E. S. Otis, 20th Inf.	10	1st Cav. and 20th Inf.					

Maj. Gen. Alfred H. Terry, headquarters Chicago, Ill., taken from the latest returns on file General's Office, 1886.

PRESENT.																	ABSENT.							AGGREGATE.				
Quartermaster's Department. Subsistence Department. Medical Department. Pay Department. Corps of Engineers. Ordnance Department. Post chaplains. Military storekeepers. Colonels. Lieutenant-colonels. Majors. Captains. Regimental chaplains. Regimental adjutants. Regimental quartermasters. Subalterns. Enlisted men. Total commissioned.																	Aggregate. General and staff officers. Field and reg'tal staff officers. Captains. Subalterns. Enlisted men. Total commissioned. Aggregate. Commissioned officers. Enlisted men. Aggregate.											
2	3	1	1	1	1										1	16	17	33								17	16	33
4	1	4	1	1	1				2							16	16	32								16	16	32
	1				1	1			7		1	1	12			340	24	364			2			2	2	26	340	366
	1								3		1	1	6			190	13	203		1	2			3	3	16	190	206
	1				1				3				8			240	14	254		2	2	3		4	7	18	243	261
	1								2				6			172	10	182		2	2			4	4	14	172	186
	2								1	1	7		17			396	28	424		2	1			3	3	31	396	427
	1								1		3		9			255	14	269		3	3			6	6	20	255	275
	1								3				4			126	9	135		1	2			3	3	12	126	138
	1								6		1	1	9			269	19	288			3			3	3	22	269	291
	1								3	1	1	1	6			168	14	182								14	168	182
	1				1				8		1	1	14			364	28	392		1	2			3	3	31	364	395
	1								2				5			117	9	126		1	1			2	2	11	117	128
	1								1				2			47	4	51								4	47	51
	1								2				3			79	6	85			1			1	1	7	79	86
4	114	4	1	1	4		5	3	6	50	1	5	5	101		2,779	208	2,987		2	11	21	3	34	37	242	2,782	3,024
3	1	5	1	1					1							17	17	34								17	17	34
	2								5		1	1	11			274	21	295		1				1	1	22	274	296
	1								1				2			45	5	50								5	45	50
									1				1			37	2	39			1			1	1	3	37	40
	1				1				4		1	1	8			279	16	295		1	2	4		7	7	23	279	302
	1				1	1	1	1	8		1	1	15			500	30	530		2	5			7	7	37	500	537
	1								1				4			73	6	79		1				1	1	7	73	80
	1								3				7			162	12	174		1	1			2	2	14	162	176
	1								2				4			83	8	91								8	83	91
	1								3		1	1	4			178	11	189		1	3			4	4	15	178	193
	1								3				6			148	11	159								11	148	159
	1				1				5				10			260	18	278		1	2			3	3	21	260	281
	1				1				1		8	1	1	11		461	25	486		2	8			10	10	35	461	496

D.—Position and distribution of troops in the

POSTS.	SITUATIONS.	COMMANDING OFFICER.	GARRISONS.		PRESENT.					
			Number of companies.	Regiments.	General officers.	Military secretary.	Aides-de-camp.	Adjutant-General's Department.	Inspectors-general.	Judge-Advocate-General's Dept.
DEPARTMENT OF DA-KOTA—cont'd.										
Fort Custer, Mont..	30 miles southeast of Custer Station.	Col. N. A. M. Dudley, 1st Cav.	7	1st Cav. and 3d Inf.	..	..	..	..	..	..
Fort Keogh, Mont.	Near Miles City	Lt. Col. M. A. Cochran, 5th Inf.	8	7th Cav. and 5th Inf.	..	..	..	..	..	..
Fort Maginnis, Mont.	115 miles northwest of Custer Station.	Lt. Col. Leslie Smith, 20th Inf.	3	1st Cav. and 20th Inf.	..	..	..	..	..	..
Fort Missoula, Mont.	Near Missoula	Lt. Col. Horace Jewett, 3d Inf.	4	3d Inf. ....	..	..	..	..	..	..
Fort Shaw, Mont...	78 miles north of Helena.	Col. J. R. Brooke, 3d Inf.	4	3d Inf. ....	..	..	..	..	..	..
Camp Poplar River, Mont.	Poplar Creek Agency.	Capt. L. Wheaton, 20th Inf.	2	20th Inf. ....	..	..	..	..	..	..
Camp Sheridan, Wyo.	Yellowstone National Park.	Capt. Moses Harris, 1st Cav.	1	1st Cav. ....	..	..	..	..	..	..
Total.....			83	.....	1	..	1	1	1	1
DEPARTMENT OF THE MISSOURI.										
Headquarters	Fort Leavenworth, Kans.	Brig. Gen. J. H. Potter.	...	Department staff.	1	..	2	1	1	..
Fort Leavenworth, Kans.	.....	Col. A. McD. McCook, 6th Inf.	10	1st, 3d, 4th, & 6th Cav., 2d Art., 6th, 11th, & 18th, Inf.	..	..	..	..	..	..
Fort Hays, Kans. ...	Near Hays City	Col. J. E. Yard, 18th Inf.	3	18th Inf. ....	..	..	..	..	..	..
Fort Riley, Kans. ...	Near Junction City...	Lt. Col. C. E. Compton, 5th Cav.	7	5th Cav. and 18th Inf.	..	..	..	..	..	..
Fort Leavenworth Military Prison, Kans.	Fort Leavenworth, Kans.	Capt. A. P. Blunt, Q. M. Dept.	...	Prison guard	..	..	..	..	..	..
Fort Reno, Ind. T. ...	Near Cheyenne Agency.	Maj. S. S. Sumner, 5th Cav.	6	5th Cav. and 24th Inf.	..	..	..	..	..	..
Fort Sill, Ind. T. ...	65 miles north of Henrietta, Tex.	Maj. G. A. Purington, 8d Cav.	6	8d Cav. and 24th Inf.	..	..	..	..	..	..
Fort Supply, Ind. T.	96 miles south of Dodge City, Kans.	Col. Z. R. Bliss, 24th Inf.	6	5th Cav. and 24th Inf.	..	..	..	..	..	..
Fort Gibson, Ind. T.	8 miles from Muscogee	Capt. C. H. Potter, 18th Inf.	2	18th Inf. ....	..	..	..	..	..	..
Fort Elliott, Tex. ...	189 miles south of Dodge City, Kans.	Maj. C. H. Carlton, 3d Cav.	4	3d Cav. and 24th Inf.	..	..	..	..	..	..
Fort Lyon, Colo. ...	Near West Las Animas.	Lt. Col. J. S. Conrad, 22d Inf.	5	10th and 22d Inf.	..	..	..	..	..	..
Cantonment on the Uncompahgre, Colo.	8 miles from Montrose	Maj. G. K. Brady, 18th Inf.	2	10th Inf. ....	..	..	..	..	..	..
Total.....			51	.....	1	..	2	1	1	..
DEPARTMENT OF TEXAS.										
Headquarters	San Antonio, Tex.	Brig. Gen. D. S. Stanley	...	Department staff.	1	..	2	1	1	..
Fort Brown, Tex. ...	Brownsville	Maj. W. L. Kellogg, 19th Inf.	8	8th Cav. and 19th Inf.	..	..	..	..	..	..
Fort Clark, Tex. ...	Brackettville	Col. C. H. Smith, 19th Inf.	13	3d and 8th Cav. and 19th Inf.	..	..	..	..	..	..

Division of the Missouri, &c.—Continued.

PRESENT.																		ABSENT.						AGGREGATE.				
Quartermaster's Department.	Subsistence Department.	Medical Department.	Pay Department.	Corps of Engineers.	Ordnance Department.	Post chaplains.	Military storekeepers.	Colonels.	Lieutenant-colonels.	Majors.	Captains.	Regimental chaplains.	Regimental adjutants.	Regimental quartermasters.	Subalterns.	Enlisted men.	Total commissioned.	Aggregate.	General and staff officers.	Field and regimental staff officers.	Captains.	Subalterns.	Enlisted men.	Total commissioned.	Aggregate.	Commissioned officers.	Enlisted men.	Aggregate.
...	2	...	...	1	...	1	...	1	...	1	6	...	1	1	8	378	21	399	...	1	6	...	...	7	7	28	378	406
...	2	...	...	1	...	...	...	1	1	...	7	...	1	1	12	365	26	391	...	1	4	...	...	5	5	31	365	396
...	1	...	...	...	...	...	...	...	1	...	3	...	...	...	4	131	9	140	...	...	2	...	2	2	11	131	142	
...	1	...	...	...	...	...	...	1	1	...	4	...	...	...	8	179	15	194	...	...	...	...	...	...	15	179	194	
...	1	...	...	...	...	...	1	...	...	...	4	...	1	1	7	207	15	222	...	...	1	...	1	1	16	207	223	
...	1	...	...	...	...	...	...	...	...	...	2	...	...	...	4	91	7	98	...	...	...	...	...	...	7	91	98	
...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	2	61	4	65	...	...	...	...	...	...	4	61	65	
3	122	5	1	1	6	...	5	8	8	71	...	8	8	128	3,929	279	4,208	...	2	12	37	...	...	51	51	330	3,929	4,259
3	2	1	5	...	1	...	...	...	...	...	...	...	...	...	...	16	17	33	2	...	...	...	...	2	2	19	16	35
...	2	...	...	1	...	1	1	2	10	...	1	1	52	538	71	609	...	...	3	...	...	...	3	3	74	538	612	
...	1	...	...	...	...	...	...	1	1	...	2	...	1	5	147	11	158	...	1	1	...	...	2	2	13	147	160	
1	1	...	...	1	...	...	...	1	...	...	7	...	1	1	9	388	22	410	...	1	5	...	...	6	6	28	388	416
2	1	...	...	1	...	...	...	...	...	...	...	...	...	...	4	96	8	104	...	...	...	...	...	...	...	8	96	104
...	2	...	...	1	...	...	...	1	4	...	...	...	...	...	6	373	14	387	...	2	6	...	...	8	8	22	373	395
...	2	...	...	...	...	...	...	1	5	...	...	...	...	...	9	315	17	332	...	1	3	...	...	4	4	21	315	336
...	1	...	...	1	...	1	1	1	3	...	1	1	8	378	17	395	...	3	4	...	...	7	7	24	378	402		
...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	3	83	5	88	...	1	1	...	...	2	2	7	83	90
...	1	...	...	1	...	...	...	1	3	...	...	...	...	...	6	255	12	267	...	1	2	...	...	3	3	15	255	270
...	1	...	...	...	...	...	...	1	5	...	...	...	...	...	7	197	14	211	...	...	3	...	...	3	3	17	197	214
...	1	...	...	...	...	...	...	1	2	...	...	...	...	...	3	73	7	80	...	...	...	...	...	...	7	73	80	
6	215	5	...	1	6	...	3	4	7	42	...	3	4	112	2,859	215	3,074	2	1	9	28	...	...	40	40	255	2,859	3,114
1	1	1	4	...	...	...	...	...	...	...	...	...	...	...	1	15	13	28	...	...	...	...	...	...	...	13	15	28
...	1	...	...	...	...	...	...	1	3	...	...	...	...	...	4	163	9	172	...	...	2	...	2	2	11	163	174	
...	2	...	...	1	...	1	1	1	9	...	1	1	20	711	36	747	...	1	4	5	...	...	10	10	46	711	757	

D.—Position and distribution of troops in the

POSTS.	SITUATIONS.	COMMANDING OFFICER.	GARRISONS.		PRESENT.					
			Number of companies.	Regiments.	General officers.	Military secretary.	Aides-de-camp.	Adjutant-General's Department.	Inspector-General.	Sergeant-General's Dept.
DEPARTMENT OF TEXAS—continued.										
Fort Concho, Tex..	85 miles south of Abilene.	Col. M. M. Blunt, 16th Inf.	6	3d Cav. and 16th Inf.	..	..	..	..	..	..
Fort Davis, Tex....	22 miles from Marfa...	Lt. Col. D. R. Clendenin, 3d Cav.	4	do	..	..	..	..	..	..
Fort McIntosh, Tex	Laredo.....	Maj. R. F. Bernard, 8th Cav.	3	8th Cav. and 16th Inf.	..	..	..	..	..	..
Fort Ringgold, Tex.	Rio Grande City.....	Capt. E. H. Liscum, 19th Inf.	3	8th Cav. and 19th Inf.	..	..	..	..	..	..
Fort Hancock, Tex.	Camp Rice Station....	Maj. S. B. M. Young, 3d Cav.	1	3d Cav	..	..	..	..	..	..
San Antonio, Tex..	.....	Col. Elmer Otis, 8th Cav.	5	8th Cav., 3d Art., and 16th Inf.	..	..	..	..	..	..
Camp Pena Colorado, Tex.	Near Marathon.....	Capt. P. D. Vroom, 3d Cav.	1	3d Cav.....	..	..	..	..	..	..
Camp Del Rio, Tex.	Del Rio.....	Capt. E. A. Godwin, 8th Cav.	1	8th Cav.....	..	..	..	..	..	..
Total.....			40	.....	1	2	1	1	..	..
Grand total Division of the Missouri.....			235	.....	5	9	6	3	2	..

Division of the Missouri, &c.—Continued.

PRESENT.															ABSENT.							AGGREGATE.												
Quartermaster's Department.	Subsistence Department.	Medical Department.	Pay Department.	Corps of Engineers.	Ordnance Department.	Post chaplains.	Military storekeepers.	Colonels.	Lieutenant-colonels.	Majors.	Captains.	Regimental chaplains.	Regimental adjutants.	Regimental quartermasters.	Subalterns.	Enlisted men.	Total commissioned.	Aggregate.	General and staff officers.	Field and reg'tal staff officers.	Captains.	Subalterns.	Enlisted men.	Total commissioned.	Aggregate.	Commissioned officers.	Enlisted men.	Aggregate.						
...	1	1	...	...	...	1	...	1	...	...	5	1	1	...	8	283	17	300	...	2	1	4	...	7	7	24	283	307	
...	1	...	...	...	1	...	...	1	...	...	3	1	1	...	7	249	15	264	...	1	1	1	...	3	3	18	249	267
...	1	...	...	...	...	...	...	...	1	...	3	...	...	...	6	148	11	159	1	...	...	...	...	1	1	12	148	160
...	1	...	...	...	...	...	...	...	...	...	2	...	...	...	4	145	7	152	...	1	2	...	...	3	3	10	145	155
...	1	...	...	...	...	...	...	...	1	...	1	...	...	...	2	61	5	66	...	...	...	...	...	...	...	5	61	66
...	1	...	...	...	...	...	...	1	1	...	4	1	1	1	11	290	20	310	...	1	1	...	...	2	2	22	290	312
...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	61	3	64	...	...	...	...	...	...	...	3	61	64
...	1	1	67	2	69	1	1	1	3	67	70					
1	1	1	4	2	2	3	1	5	32	1	4	4	66	2,193	138	2,331	1	5	8	15	29	29	167	2,193	2,360	16	8	62	19	3	3	18	249	267
16	8	62	19	3	3	18	16	16	26	195	1	29	41	408	11,776	857	12,633	3	10	40	101	3	154	157	1,011	11,779	12,790							

E.—Position and distribution of troops in the Division of the Pacific, commanded by Major-General M. M. Hays, on file in the Adjutant-General's Office.

POSTS.	SITUATIONS.	COMMANDING OFFICER.	Number of companies.	GARRISONS.	PRESENT.				
				Regiments.	General officers.	Military secretary.	Aides-de-camp.	Adjutant-General's Department.	Inspector-General.
				Divis'n staff.	1		2	1	1
DEPARTMENT OF CALIFORNIA.									
Headquarters	Presidio of San Francisco, Cal.	Maj. Gen. O. O. Howard.	..	Department staff.	..	..	..	..	..
Alcatraz Island, Cal.	San Francisco Harbor.	Maj. A. M. Randol, 1st Art.	2	1st Art.	..	..	..	..	..
Angel Island, Cal.	do	Col. W. R. Shafter, 1st Inf.	2	1st Inf.	..	..	..	..	..
Fort Mason, Cal.	do	Capt. J. A. Darling, 1st Art.	1	1st Art.	..	..	..	..	..
Fort Winfield Scott, Cal.	do	Capt. Tully McCrea, 1st Art.	2	do	..	..	..	..	..
Presidio of San Francisco, Cal.	do	Lt. Col. Alex'r Piper, 1st Art.	5	1st Art. and 1st Inf.	..	..	..	..	..
Benicia Barracks, Cal.	Benicia	Lt. Col. C. G. Bartlett, 1st Inf.	2	1st Inf.	..	..	..	..	..
Fort Bidwell, Cal.	In Surprise Valley....	Maj. D. S. Gordon, 2d Cav.	1	2d Cav.	..	..	..	..	..
Fort Gaston, Cal.	In Hoopa Valley.....	Capt. W. E. Dougherty, 1st Inf.	1	1st Inf.	..	..	..	..	..
San Diego Barracks, Cal.	San Diego	Capt. Matthew Markland, 1st Inf.	1	do	..	..	..	..	..
Fort Halleck, Nev.	12 miles south of Halleck Station.	Capt. R. G. Armstrong, 1st Inf.	1	do	..	..	..	..	..
Fort McDermitt, Nev.	80 miles north of Winnemucca.	1st Lt. L. H. Strother, 1st Inf.	1	do	..	..	..	..	..
Total			19						
DEPARTMENT OF ARIZONA.									
Headquarters	Whipple Barracks, Ariz.	Brig. Gen. N. A. Miles ..	..	Department staff.	1	..	1	1	..
Fort Apache, Ariz.	90 miles south of Holbrook.	Lt. Col. J. F. Wade, 10th Cav.	5	10th Cav. and 9th Inf.	..	..	..	..	..
Fort Bowie, Ariz.	Bowie Station	Maj. E. B. Beaumont, 4th Cav.	4	4th Cav. and 8th Inf.	..	..	..	..	..
Fort Grant, Ariz.	25 miles north of Willcox.	Col. B. H. Grierson, 10th Cav.	7	10th Cav. and 8th Inf.	..	..	..	..	..
Fort Huachuca, Ariz.	Near Huachuca Station.	Lt. Col. G. A. Forsyth, 4th Cav.	8	4th Cav. and 8th Inf.	..	..	..	..	..
Fort Lowell, Ariz.	Near Tucson	Col. A. V. Kantz, 8th Inf.	4	do	..	..	..	..	..
Fort McDowell, Ariz.	56 miles north of Maricopa.	Lt. Col. M. Bryant, 8th Inf.	3	2d Cav. and 8th Inf.	..	..	..	..	..
Fort Mojave, Ariz.	Near Mojave City	Capt. A. W. Corliss, 8th Inf.	1	8th Inf.	..	..	..	..	..
Fort Thomas, Ariz.	64 miles northwest of Bowie Station.	Maj. F. Van Vleet, 10th Cav.	4	10th Cav. and 9th Inf.	..	..	..	..	..
Fort Verde, Ariz.	38 miles east of Prescott.	Maj. C. B. McLellan, 10th Cav.	3	do	..	..	..	..	..
Whipple Barracks, Ariz.	Prescott	Col. J. S. Mason, 9th Inf.	1	9th Inf.	..	..	..	..	..
San Carlos, Ariz.	do	Capt. F. E. Pierce, 1st Inf.	1	10th Cav. and Ind'n sects.	..	..	..	..	..
Santa Fé, N. Mex.	Headquarters District of New Mexico.	Col. L. P. Bradley, 13th Inf.	..	..	..	..	..	..	..
Fort Bayard, N. Mex.	Near Silver City	Lt. Col. A. P. Morrow, 6th Cav.	6	6th Cav. and 13th Inf.	..	..	..	..	..
Fort Marcy, N. Mex.	Santa Fé	Capt. C. J. Diekey, 22d Inf.	1	22d Inf.	..	..	..	..	..

E.—Position and distribution of troops in

POSTS.	SITUATIONS.	COMMANDING OFFICER.	GARRISONS.		PRESENT.					
			Number of companies.	Regiments.	General officers.	Military secretary.	Aides-de-camp.	Adjutant-General's Department.	Inspector-general.	Judge-Advocate-general's Dept.
DEPARTMENT OF ARIZONA—cont'd.										
Fort Selden, N. Mex	14 miles from Las Cruces.	Capt. Arthur MacArthur, 13th Inf.	1	13th Inf.						
Fort Cummings, N. Mex.	Near Florida	Capt. A. R. Chaffee, 6th Cav.	1	6th Cav.						
Fort Stanton, N. Mex.	9 miles from Lincoln ..	Maj. D. M. Vance, 13th Inf.	5	6th Cav. and 13th Inf.						
Fort Union, N. Mex.	8 miles from Watrons .	Col. Henry Douglass, 10th Inf.	3	10th Inf.						
Fort Wingate, N. Mex.	Near Wingate Station.	Lt. Col. R. E. A. Crofton, 13th Inf.	10	6th Cav. ; 9th & 13th Inf.						
Fort Lewis, Colo ...	12 miles from Durango.	Col. P. T. Swaine, 22d Inf.	8	6th Cav. and 22d Inf.						
Fort Bliss, Tex.	El Paso	Capt. Gregory Barrett, 10th Inf.	3	10th Inf.						
Total			79		1		1	1		
DEPARTMENT OF THE COLUMBIA.										
Headquarters	Vancouver Barracks, Wash. Ter.	Brig. Gen. John Gibbon.			1		1	1		
Boisé Barracks, Idaho.	Boisé City	Lt. Col. John Green, 2d Cav.	2	2d Cav. and 4th Inf.						
Fort Coeur d'Alene, Idaho.	11 miles from Rathdrum.	Col. W. P. Carlin, 4th Inf.	5	do						
Fort Canby, Wash. Ter.	Mouth of Columbia River.	Maj. J. I. Rodgers, 1st Art.	2	1st Art.						
Fort Spokane, Wash. Ter.	Near Spokane Falls...	Maj. J. F. Kent, 4th Inf.	6	2d Cav. and 4th Inf.						
Fort Townsend, Wash. Ter.	Port Townsend	Capt. A. H. Bainbridge, 14th Inf.	1	14th Inf.						
Fort Walla Walla, Wash. Ter.	Walla Walla	Col. N. B. Sweitzer, 2d Cav.	5	2d Cav.						
Vancouver Barracks, Wash. Ter.	Vancouver	Lt. Col. J. D. De Russey, 14th Inf.	10	1st Art. and 14th Inf.						
Fort Klamath, Oreg.	Near Lake Klamath ..	Maj. F. T. Bennett, 2d Cav.	1	2d Cav.						
Total			32		1		1	1		
Grand total, Division of the Pacific			130		3		4	3	1	

the Division of the Pacific, &c.—Continued.

PRESENT.																		ABSENT.						AGGREGATE.					
Quartermaster's Department. Subsistence Department. Medical Department. Pay Department. Corps of Engineers. Ordnance Department. Post-chaplains. Military storekeepers. Colonels. Lieutenant-colonels. Majors. Captains. Regimental chaplains. Regimental adjutants. Regimental quartermasters. Subalterns. Enlisted men. Total commissioned. Aggregate. General and staff officers. Field and reg'tal staff officers. Captains. Subalterns. Enlisted men. Total commissioned. Aggregate. Commissioned officers. Enlisted men. Aggregate.																		ABSENT.						AGGREGATE.					
..	1	1	45	2	47	1	..	1	1	3	45	48
..	..	1	1	2	56	4	60	4	56	60	
..	..	2	..	..	..	..	..	..	1	..	3	..	..	..	7	312	13	325	..	2	3	..	5	5	18	312	330
..	..	1	..	..	..	1	1	1	1	..	2	..	1	1	4	150	12	162	..	1	2	..	3	3	15	150	165
..	..	1	..	..	..	..	..	..	1	1	6	..	..	..	17	448	26	474	1	4	3	..	8	8	34	448	482
..	..	1	..	..	..	..	..	1	1	8	..	1	1	12	368	25	393	..	..	4	..	4	4	29	368	397	
..	..	1	..	..	..	..	..	..	..	3	..	..	..	4	135	8	143	..	..	2	..	2	2	10	135	145	
3	2	19	5	1	..	3	..	6	6	10	63	1	8	8	123	4,483	261	4,744	1	5	17	36	..	59	59	320	4,483	4,803	
2	1	1	2	1	1	..	..	1	..	..	..	..	..	..	1	14	13	27	..	..	..	..	..	..	13	14	27
..	..	1	..	..	..	..	..	1	..	..	1	..	..	..	2	102	5	107	..	1	1	..	2	2	7	102	109
..	..	1	..	..	..	..	..	1	..	..	4	..	1	1	5	258	13	271	..	1	5	..	6	6	19	258	277
..	..	1	..	..	..	..	..	..	1	..	1	..	..	..	3	70	6	76	..	1	3	..	4	4	10	70	80
..	..	1	..	..	1	..	..	..	1	6	..	..	..	..	10	278	19	297	..	..	2	..	2	2	21	278	299
..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	1	52	3	55	..	..	1	..	1	1	4	52	56
..	..	2	..	..	..	..	1	1	1	4	..	1	1	..	5	304	15	319	..	1	5	..	6	6	21	304	325
..	..	3	..	..	..	..	..	1	..	7	..	1	1	19	493	32	525	..	2	3	3	..	8	8	40	493	533
..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	2	66	4	70	..	..	..	..	..	..	4	66	70
2	1	11	2	1	1	1	..	2	3	4	25	..	3	8	48	1,637	110	1,747	..	2	7	20	..	29	29	139	1,637	1,776	
7	4	41	12	3	1	8	..	9	11	17	100	1	13	13	200	6,946	452	7,398	1	7	31	71	..	110	110	562	6,946	7,508	

F.—Geographical Divisions, Departments, and Posts,

WITH POST-OFFICES, TELEGRAPH STATIONS, AND NEAREST RAILROAD STATIONS OR
BOAT LANDINGS.

DIVISION OF THE ATLANTIC.

Maj. Gen. JOHN M. SCHOFIELD, comdg.—Hdqrs. Governor's Island, New York Harbor.
Embraces the Department of the East.

DEPARTMENT OF THE EAST.

Maj. Gen. JOHN M. SCHOFIELD, comdg.—Hdqrs. Governor's Island, New York Harbor.

Geographical limits.—The New England States, States of New York, New Jersey, Pennsylvania, Delaware Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Louisiana, Arkansas, Mississippi, Alabama, Kentucky, Tennessee, Ohio, Michigan, Wisconsin, Indiana, and the District of Columbia.

DIVISION OF THE MISSOURI.

Maj. Gen. ALFRED H. TERRY, comdg.—Hdqrs. Chicago, Ill. Embraces the Departments of the Platte, Dakota, Missouri, and Texas.

DEPARTMENT OF THE PLATTE.

Brig. Gen. GEORGE CROOK, comdg.—Hdqrs. Omaha, Nebr.

Geographical limits.—States of Iowa and Nebraska; Territories of Utah and Wyoming, and so much of the Territory of Idaho as lies east of a line formed by the extension of the western boundary of Utah to the northeastern boundary of Idaho.

DEPARTMENT OF DAKOTA.

Brig. Gen. THOMAS H. RUGER, comdg.—Hdqrs. Fort Snelling, Minn.

Geographical limits.—State of Minnesota and Territories of Dakota and Montana.

DEPARTMENT OF THE MISSOURI.

Brig. Gen. JOSEPH H. POTTER, comdg.—Hdqrs. Fort Leavenworth, Kans.

Geographical limits.—States of Missouri, Kansas, Illinois, and Colorado, excepting the post of Fort Lewis, Colo.; the Indian Territory; and the post of Fort Elliott, Texas.

DEPARTMENT OF TEXAS.

Brig. Gen. DAVID S. STANLEY, comdg.—Hdqrs. San Antonio, Tex.

Geographical limits.—State of Texas, excepting the post of Fort Elliott, Tex., and that portion of El Paso County embraced in the Department of Arizona.

DIVISION OF THE PACIFIC.

Maj. Gen. OLIVER O. HOWARD, comdg.—Hdqrs. Presidio of San Francisco, Cal. Embraces the Departments of California, Arizona, and the Columbia.

DEPARTMENT OF CALIFORNIA.

Maj. Gen. OLIVER O. HOWARD, comdg.—Hdqrs. Presidio of San Francisco, Cal.

Geographical limits.—States of California and Nevada.

DEPARTMENT OF ARIZONA.

Brig. Gen. NELSON A. MILES, comdg.—Hdqrs. Whipple Barracks, Prescott, Ariz.

Geographical limits.—Territories of Arizona and New Mexico, the post of Fort Lewis, Colo., and that portion of El Paso County, Tex., lying north of an east and west line passing immediately south of San Elizario.

DEPARTMENT OF THE COLUMBIA.

Brig. Gen. JOHN GIBBON, comdg.—Hdqrs. Vancouver Barracks, Wash. T.

Geographical limits.—State of Oregon, and the Territories of Washington, Idaho, and Alaska, excepting so much of Idaho as is embraced in the Department of the Platte.

POSTS.

[Those not garrisoned are indicated thus, *.]

- Abraham Lincoln, Fort, Dak.* (Dept. Dak.)—P. O. and tel. stn. same; boat ldg. at post and buckboard daily from Mandan, on N. P. R. R., dist. 6½ m.
- Adams, Fort, R. I.* (Dept. East.)—P. O. and tel. stn. Newport, R. I.; boat from Newport, dist. 3 m.
- Alcatraz Island, Cal.* (Dept. Cal.)—P. O. and tel. stn. same; R. R. stn. San Francisco, Cal., dist. 4 m.; steamer to post.
- Angel Island, Cal.* (Dept. Cal.)—P. O. and tel. stn. same; R. R. stn. San Francisco, Cal., dist. 7 m.; steamer to post.
- Apache, Fort, Ariz.* (Dept. Ariz.)—P. O. and tel. stn. same; buckboard from Holbrook, on A. and P. R. R., six times a week, dist. 90 m.
- Assiniboine, Fort, Mont.* (Dept. Dak.)—P. O. and tel. stn. same; daily stage from Billings and Helena, on N. P. R. R., to Benton, dist., respectively, 210 and 134 m., and thence tri-weekly to post, distance 72 m.; stmbt. ldg. (summer) Coal Banks, on Missouri River, dist. 42 m., and stmbt. ldg. for low-water season of navigation, Broadwater's Landing, dist. 110 m.
- Barrancas, Fort, Fla.* (Dept. East.)—P. O. Warrington, Fla.; tel. stn. Pensacola Navy Yard, Fla.; R. R. stn. at Pensacola, Fla., dist. 9 m.
- Bayard, Fort, N. Mex.* (Dept. Ariz.)—P. O. and tel. stn. same; stage daily (except Sunday) from Silver City, on the S. C. D. and P. R. R., dist. 9 m.
- Benicia Barracks, Cal.* (Dept. Cal.)—P. O., tel., and R. R. stn. Benicia, Cal., on C. P. R. R., dist. 1 m.
- Bennett, Fort, Dak.* (Dept. Dak.)—P. O. same; tel. stn. Fort Sully, Dak., dist. 7 m.; tri-weekly stage from Pierre, Dak., on C. and N. W. R. R., dist. 28 m.; stmbt. ldg. (summer), dist. 6 m.
- Bidwell, Fort, Cal.* (Dept. Cal.)—P. O. and tel. stn. same; daily stage (except Sunday) from Reno, Nev., on C. P. R. R., dist. 193 m.
- Bliss, Fort, Tex.* (Dept. Ariz.)—P. O., tel., and R. R. stn. (A. T. and S. F., S. P., T. and P., G. H. and S. A., and Mexican Central R. R.'s.) El Paso, Tex., dist. 1½ m.
- Boise Barracks, Idaho* (Dept. Columbia.)—P. O. and tel. stn. Boise City, Idaho, dist. 1 m.; daily stage from Kuna, Idaho, on the O. S. L. R. R., dist. 14 m.
- Bowie, Fort, Ariz.* (Dept. Ariz.)—P. O. and tel. stn. same; daily buckboard from Bowie Station, Ariz., on S. P. R. R., dist. 13 m.
- Brady, Fort, Mich.* (Dept. East.)—P. O. and tel. stn. Sault Ste. Marie, Mich.; boats land at post in summer; sled in winter from Mackinaw City, on G. R. and I. R. R., and M. C. R. R., dist. 68 m.
- Bridger, Fort, Wyo.* (Dept. Platte.)—P. O. and tel. stn. same (via Carter, Wyo.); daily buckboard from Carter Station, on U. P. R. R., dist. 10 m.
- Brown, Fort, Tex.* (Dept. Tex.)—P. O., tel., and R. R. stn. (R. G. R. R.) Brownsville, Tex. Reached by Morgan steamers about every ten days from Morgan City or Galveston, or by buckboard, via Ringgold, from Peña Station on M. N. R. R.
- Buford, Fort, Dak.* (Dept. Dak.)—P. O. and tel. stn. same; stmbt. ldg. at post on Missouri River, dist. 303 m. from Bismarck; stage tri-weekly from Glendive, on N. P. R. R., dist. 75 m.
- Canby, Fort, Wash. T.* (Dept. Columbia.)—P. O. Astoria, Oreg.; tel. stn. at post; daily steamer from R. R. stn., Portland, Oreg., to Astoria, dist. 98 m., and thence by steam tug daily (except Sunday) to post, dist. 14 m.
- * *Carroll, Fort, Md.*—P. O. and tel. stn. Baltimore, Md., dist. 8 m. by water.
- * *Caswell, Fort, N. C.*—P. O. and tel. stn. Smithville, N. C., dist. 2 m.; steamer daily from Wilmington to Smithville, dist. 22 m.

- Clark, Fort, Tex.* (Dept. Tex.)—P. O. Brackettville, Tex.; tel. stn. Spofford Junction; telephone to Brackettville; daily stage from Spofford Junction, Tex., on G., H. and S. A. R. R., dist. 9 m.
- * *Clark's Point, Mass., Fort at.*—P. O. and tel. stn. New Bedford, Mass.; private conveyance from New Bedford, dist. 3 m.
- * *Clinch, Fort, Fla.*—P. O., tel., and R. R. stn. Fernandina, Fla., dist. 3 m.
- Cœur d'Alene, Fort, Idaho* (Dept. Columbia).—P. O., R. R., and tel. stn. same, terminus of Cœur d'Alene branch N. P. R. R.; daily stage from Rathdrum, Idaho, on N. P. R. R., dist. 11 m.
- Columbus Barracks, Ohio.* (See Recruiting Depots.)
- Columbus, Fort, N. Y. H.* (Dept. East.)—P. O. and tel. stn. Governor's Island, N. Y.; Government steamer from New York City, dist. 1½ m.
- Concho, Fort, Tex.* (Dept. Tex.)—P. O. and tel. stn. San Angelo, Tex.; daily stage from Ballinger, Tex., on Gulf, Colorado and Santa Fé R. R., dist. 37 m.
- * *Constitution, Fort, N. H.*—P. O. New Castle, N. H.; tel. stn. Portsmouth, N. H.; stage from Portsmouth, dist. 3 m.
- * *Cummings, Fort, N. Mex.* (Dept. Ariz.)—P. O. same; tel. stn. Deming, N. Mex.; R. R. stn. Florida, N. Mex., on A. T. and S. Fé R. R., dist. 5 m.
- Custer, Fort, Mont.* (Dept. Dak.)—P. O. and tel. stn. same; daily stage from Custer station, on N. P. R. R., dist. 32 m.
- D. A. Russell, Fort, Wyo.* (Dept. Platte.)—P. O., tel., and R. R. stn. Cheyenne, Wyo., on U. P. R. R., dist. 3 m.
- Dauids Island, N. Y.* (See Recruiting Depots.)
- Davis, Fort, Tex.* (Dept. Tex.)—P. O. and tel. stn. same; daily stage from Marfa, dist. 22 m., and from Murphysville, dist. 24 m., on G., H. and S. A. R. R.
- * *Delaware, Fort, Del.*—P. O. and tel. stn. Delaware City, Del.; daily steamer from Philadelphia to Delaware City, dist. 1½ m. from post.
- Del Rio, Camp, Tex.* (Dept. Tex.)—P. O., tel., and R. R. stn. Del Rio, on G. H. and S. A. R. R., dist. 1 m.
- Douglas, Fort, Utah* (Dept. Platte).—P. O., tel., and R. R. stn. Salt Lake City, Utah, dist. 3 m.
- Du Cheene, Fort, Utah* (Dept. Platte).—P. O. Uintah Agency, Utah; R. R. and tel. stn. Price's Stn., on Denver and Rio Grande Western R. W., dist. 76 m.
- * *Dutch Island, Fort on, R. I.*—P. O. Jamestown, R. I.; tel. stn. Newport, R. I.; special conveyance from Newport, dist. 5 m.
- Elliott, Fort, Tex.* (Dept. Mo.)—P. O. Mobeetie, Tex.; tel. stn. at post; daily stage or buckboard (except Monday) from Harrold, Tex., on Ft. W. and D. C. R. R., dist. 140 m., and tri-weekly from New Kiowa, Kans. (via Fort Supply), on St. L., Ft. S. and W. R. R., dist. 161 m.
- * *Finn's Point, N. J. Battery at.*—P. O. and tel. stn. Salem, N. J., dist. 6 m.
- * *Foote, Fort, Md.*—P. O. same; tel. stn. Alexandria, Va.; steamer from Washington, D. C., dist. 9 m.
- * *Gaines, Fort, Ala.*—P. O., tel., and R. R. stn. Mobile, Ala.; boat from Mobile, dist. 30 m.
- Gaston, Fort, Cal.* (Dept. Cal.)—P. O. Hoopa Valley, Cal.; tel. stn. Eureka or Arcata, Cal.; bi-weekly steamers from San Francisco to Arcata, dist. 284 m.; thence by saddle-animal (mountain trail), dist. 40 m.
- Gibson, Fort, Ind. T.* (Dept. Mo.)—P. O. same; tel. stn. Muscogee or Gibson Station; daily stage (except Sunday) from Muscogee, on M. P. R. R., dist. 8 m.
- * *Gorges, Fort, Me.*—P. O. and tel. stn. Portland, Me., dist. 2 m.
- Grant, Fort, Ariz.* (Dept. Ariz.)—P. O. and tel. stn. same; daily stage (except Sunday) from Wilcox, on S. P. R. R., dist. 27 m.
- * *Griswold, Fort, Conn.*—P. O. Groton, Conn.; tel. stn. New London, Conn.; ferry from New London, dist. 1 m.
- Halleck, Fort, Nev.* (Dept. Cal.)—P. O. same; tel. and R. R. stn. Halleck Station, on C. P. R. R., dist. 12 m.; buckboard daily (except Sunday) to post.
- Hamilton, Fort, N. Y.* (Dept. East.)—P. O. and tel. stn. same; city railroad from Brooklyn, dist. 6 m.
- Hancock, Fort, Tex.* (Dept. Tex.)—P. O. and tel. stn. same; Fort Hancock Station, on South and Tex. Pac. R. R., dist. 3½ m.
- Hays, Fort, Kans.* (Dept. Mo.)—P. O., tel., and R. R. stn. (U. P. R. R.) Hays City, Kans.
- Huachuca, Fort, Ariz.* (Dept. Ariz.)—P. O. same; tel. stn. Huachuca Siding, and telephone thence to post; daily buckboard from Huachuca Siding, on N. M. and A. R. R., dist. 7 m.
- * *Independence, Fort, Mass.*—P. O. and tel. stn. Boston, Mass.; Government tug from Boston, dist. 3 m.
- Jackson Barracks, La.* (Dept. East.)—P. O. and R. R. stn. New Orleans, La., dist. 6 m.; W. U. tel. sta., Slaughter House, St. Bernard Parish, La.

- * *Jackson, Fort, La.*—P. O. Neptune, La.; tel. stn. Quarantine, La.; steamer tri-weekly from New Orleans, dist. 73 m.
- Jefferson, Barracks, Mo.* (See Recruiting Depots.)
- * *Jefferson, Fort, Fla.*—P. O. and tel. stn. Key West, Fla.; boat from Key West, dist. 71 m.
- * *Johnston, Fort, N. C.*—P. O. and tel. stn. Smithville, N. C.; steamer daily from Wilmington, N. C., dist. 22 m.
- Keogh, Fort, Mont.* (Dept. Dak.)—P. O., tel., and R. R. stn. (N. P. R. R.) same.
- * *Key West Barracks, Fla.* (Dept. East.)—P. O., tel. stn., and boat ldg. Key West, Fla.
- Klamath, Fort, Oreg.* (Dept. Columbia.)—P. O. and tel. stn. same; stage from Soda Springs, Cal., on Oregon branch of C. P. R. R., dist. 187 m.; and from Ashland, Oreg., on O. and C. R. R., dist. 100 m.
- * *Knox, Fort, Me.*—P. O. Prospect Ferry, Me; tel. stn. Bucksport, Me.; ferry from Bucksport, dist. $\frac{3}{4}$ m.
- * *Lafayette, Fort, N. Y. H.*—P. O. and tel. stn. Fort Hamilton, N. Y.; city railroad from Brooklyn, dist. 6 m.
- Laramie, Fort, Wyo.* (Dept. Platte.)—P. O. and tel. stn. same; stage daily from Lusk, on Fremont, Elkhorn and Mo. Val. R. R., dist. 45 m.; and from Cheyenne, on U. P. R. R., dist. 90 m.
- Leavenworth, Fort, Kans.* (Dept. Mo.)—P. O., tel., and R. R. stn. (M. P. R. R., and C. R. I. and P. R. R.) same.
- Leavenworth Military Prison, Kans.* (Dept. Mo.)—P. O., tel., and R. R. stn. same as Fort Leavenworth.
- Lewis, Fort, Colo.* (Dept. Ariz.)—P. O. same; tel. stn. Durango, Colo. (telephone to post); stage from Durango, Colo., on D. and R. G. R. R., dist. 12 m.
- Little Rock Barracks, Ark.* (Dept. East.)—P. O., tel., and R. R. stn. Little Rock, Ark.
- * *Livingston, Fort, La.*—P. O. Grand Isle, La.; tel. stn. New Orleans, La.; steamer tri-weekly from New Orleans, dist. 95 m.
- Lowell, Fort, Ariz.* (Dept. Ariz.) P. O. and tel. stn. Tucson, Ariz.; special conveyance from Tucson, on S. P. R. R., dist. 7 m.
- Lyon, Fort, Colo.* (Dept. Mo.)—P. O. same; tel. (telephone to post) and R. R. stn. Las Animas, Colo., on A. T. and S. F. R. R., dist. 7 m.
- Mackinac, Fort, Mich.* (Dept. East.)—P. O. and tel. stn. Mackinac Island, Mich.; boat from R. R. stn. (M. C. R. and G. R. and I. R. R.) at Mackinaw City, dist. 11 m., and from St. Ignace, Mich., on D. M. and M. R. R., dist. 5 m.; steamboats from Chicago, Detroit, and other Lake ports arrive daily.
- * *Macomb, Fort, La.*—P. O. Lee, La.; tel. and R. R. stn. Chef Menteur, La., dist. $1\frac{1}{2}$ m.
- * *Macon, Fort, N. C.*—P. O. Beaufort, N. C.; tel. stn. at post; boat from R. R. at Morehead City, N. C., dist. 2 m.
- Madison Barracks, N. Y.* (Dept. East.)—P. O., tel., and R. R. stn. Sackett's Harbor, N. Y.
- Maginnis, Fort, Mont.* (Dept. Dak.)—P. O. and tel. stn. same; stmbt. (summer) to Rocky Point, Mont. (Missouri River), dis. 53 m.; R. R. stn. Custer Station, Mont., on N. P. R. R., dist. 110 m.; and to Helena, dist. 184 m.; mail wagon from Custer Station tri-weekly. No regular conveyance from Rocky Point.
- Marcy, Fort, N. Mex.* (Dept. Ariz.)—P. O., tel., and R. R. stn. (A. T. and S. F. R. R.) Santa Fé, N. Mex.
- * *Marion, Fort, Fla.* (Dept. East.)—P. O., tel., and R. R. stn. St. Augustine, Fla.
- * *Mason, Fort, Cal.* (Dept. Cal.)—P. O. and R. R. stn. San Francisco, Cal., dist. 3 m. tel. stn. at post.
- * *McClary, Fort, Me.*—P. O. Kittery Point, Me.; tel. stn. Portsmouth, N. H.; stage twice daily from Portsmouth, dist. $4\frac{1}{2}$ m.
- McDermitt, Fort, Nev.* (Dept. Cal.)—P. O. same; tel. stn. Willow Point, Nev.; R. R. stn. Winnemucca, on C. P. R. R., dist. 79 m.; buckboard daily (except Sunday).
- McDowell, Fort, Ariz.* (Dept. Ariz.)—P. O. and tel. stn. same; tri-weekly stage from Maricopa, Ariz., on S. P. R. R., via Phoenix, dist. 66 m.
- McHenry, Fort, Md.* (Dept. East.)—P. O., tel., and R. R. stn. Baltimore, Md.
- McIntosh, Fort, Tex.* (Dept. Tex.)—P. O., tel., and R. R. stn. Laredo, Tex; dis. $\frac{3}{4}$ m.
- McKinney, Fort, Wyo.* (Dept. Platte.)—P. O. and tel. stn. same; daily stage from Fetterman, on Fremont, Elkhorn and Mo. Valley R. R.; dis. 135 m., and from Custer Station, on the N. P. R. R., dist. 149 m.
- Meade, Fort, Dak.* (Dept. Dak.)—P. O. same; tel. stn. Deadwood, Dak.; thence telephone to post; daily stage from Rapid City, on Fremont, Elkhorn, and Mo. Valley R. R., dist. 30 m.
- Medicine Butte Camp, Wyo.* (Dept. Platte.)—P. O., tel., and R. R. stn. Evanston, Wyo., on U. P. R. R.
- * *Mifflin, Fort, Pa.*—P. O. and tel. stn. Philadelphia, Pa.; special conveyance from Paschall, on P. W. and B. R. R., dist. 5 m., or by Delaware River from Philadelphia, dist. 7 m.

- Missoula, Fort, Mont.* (Dept. Dak.)—P. O. same; tel. (telephone to post) and R. R. stn. (N. P. R. R.) Missoula, Mont., dist. 4 m.
- Mojave, Fort, Ariz.* (Dept. Ariz.)—P. O. Mojave City, Ariz.; tel. and R. R. stn. Needles, Cal., on A. and P. R. R., dist., 25 m., and (summer) from Powell, Ariz., on same R. R., dist. 25 m.
- Monroe, Fort, Va.* (Dept. East.)—P. O. and tel. stn. same; steamboats daily from Baltimore, Washington, Norfolk, and New York, and railroad (C. and O.) from Richmond.
- * *Montgomery, Fort, N. Y.*—P. O., tel., and R. R. stn. (O. and L. C. R. R.) Rouse's Point, N. Y., dist. 2 m.
- * *Morgan, Fort, Ala.*—P. O. Herndon, Ala.; tel. stn. at post; steamer from Mobile, dist. 30 m.
- * *Moultrie, Fort, S. C.*—P. O. Moultrieville, S. C.; tel. and R. R. stn. Charleston, S. C., dist. 5 m.
- Mount Vernon Barracks, Ala.* (Dept. East.)—P. O. Mount Vernon, Ala.; tel. and R. R. stn. Citronelle, Ala., dist. 17 m. (no regular conveyance to post); Fort Stoddard ldg. on Mobile River, dist. 3 m.; boats from Montgomery and Mobile stop at this landing when required.
- * *Myer, Fort, Va.*—P. O. and R. R. stn. Washington, D. C.
- Newport Barracks, Ky.* (Dept. East.)—P. O., tel., and R. R. stn. Newport, Ky.
- Niagara, Fort, N. Y.* (Dept. East.)—P. O. Youngstown, N. Y.; tel. and R. R. stn. Lewiston, N. Y.; stage from Lewiston, dist. 7 m.
- Niobrara, Fort, Nebr.* (Dept. Platte.)—P. O. same; tel. and R. R. stn. Valentine, Nebr., on Fremont, Elkhorn and Mo. Valley R. R., dist. 4½ m.
- * *Oglethorpe, Fort, Ga.*—P. O., tel., and R. R. stn. Savannah, Ga., dist. 4 m.
- Omaha, Fort, Nebr.* (Dept. Platte.)—P. O. same; tel. (telephone to post) and R. R. str. Omaha, dist. 4 m.
- Ontario, Fort, N. Y.* (Dept. East.)—P. O., tel., and R. R. stn. Oswego, N. Y.
- Pembina, Fort, Dak.* (Dept. Dak.)—P. O. and tel. stn. Pembina, Dak.; R. R. stn. St. Vincent, on St. P., M. and M. R. R., dist. 2 m.
- Pena Colorado, Camp, Tex.* (Dept. Tex.)—P. O., tel., and R. R. stn. Marathon, Tex., on G. H. and S. A. R. R., dist. 4 m.
- * *Phenix, Fort, Mass.*—P. O. and tel. stn. Fairhaven, Mass.
- * *Pickens, Fort, Fla.*—P. O. Warrington, Fla.; tel. stn. Pensacola navy-yard; R. R. stn. at Pensacola, Fla., dist. 10 m.
- * *Pike, Fort, La.*—P. O. same; tel. stn. Miller's Bayou, La.; boat daily from Lake Catherine Station, on N. O. and M. R. R., dist. 7 m.; steamer tri-weekly from New Orleans, dist. 28 m.
- Pilot Butte, Camp, Wyo.* (Dept. Platte.)—P. O., tel., and R. R. stn. Rock Springs, Wyo., on U. P. R. R.
- Plattsburgh Barracks, N. Y.* (Dept. East.)—P. O., tel., and R. R., stn. Plattsburgh, N. Y.
- * *Popham, Fort, Me.*—P. O. Hunnewell's Point, Me.; tel. stn. Bath, Me.; stage or water from Bath, Me., dist. 12 m. by water, 15 m. by land.
- Popular River, Camp, Mont.* (Dept. Dak.)—P. O. and tel. stn. at post; stmbt. ldg. (summer) at post, dist. from Bismarck, 395 m.; and semi-weekly buckboard from Glendive, on N. P. R. R., via Fort Buford, dist. 140 m.
- Porter, Fort, N. Y.* (Dept. East.)—P. O., tel., and R. R. stn. Buffalo, N. Y.
- Preble, Fort, Me.* (Dept. East.)—P. O. and tel. stn. Portland, Me.; special conveyance, by land or water, from Portland, dist. 2½ m.
- Presidio of San Francisco, Cal.* (Dept. Cal.)—P. O. and R. R. stn. San Francisco, Cal., dist. 4½ m.; tel. stn. at post; city railway from San Francisco to post.
- * *Pulaski, Fort, Ga.*—P. O. and R. E. stn. Savannah, Ga., dist. 14 m.; tel. stn. Tybee Island, Ga.
- Randall, Fort, Dak.* (Dept. Dak.)—P. O. same; tel. stn. White Swan, Dak.; stage six times a week from Mitchell, D. T., dist. 60 m.; and tri-weekly from Springfield, Dak., on C. M. and S. P. R. R., dist. 45 m.
- Reno, Fort, Ind. T.* (Dept. Mo.)—P. O. and tel. stn. same; daily stage (except Monday) from Caldwell, Kans., on Caldwell branch A. T. and S. F. R. R., dist. 110 m.
- Riley, Fort, Kans.* (Dept. Mo.)—P. O. same; R. R. stn. (K. P. and M. K. and T. R. Rs.) Junction City, Kans., dist. 3 m.; tel. stn. via Junction City, Kans.
- Ringgold, Fort, Tex.* (Dept. Tex.)—P. O. and tel. stn. Rio Grande City, Tex.; stage from R. R. stn. (R. G. R. R.) at Brownsville, Tex., dist. 117 m.; from Peña, on T. M. R. R., dist. 90 m.; and from San Miguel, Mex. on Mex. N. R. R., dist. 23 m.
- Robinson, Fort, Nebr.* (Dept. Platte.)—P. O., tel., and R. R. stn. (F. E. and M. V. R. R.) same; stage from Sidney, on U. P. R. R., dist. 120 m.
- San Antonio, Tex.* (Dept. Tex.)—P. O., tel., and R. E. stn. same.
- San Carlos, Ariz.* (Dept. of Ariz.)—P. O. and tel. stn. same; R. R. stn. Bowie, on S. P. R. R., dist. 102 m.

- San Diego Barracks, Cal.* (Dept. Cal.)—P. O., tel., R. R. stn. (C. S. R. R.), and boat ldg. San Diego, Cal.
- * *Sandy Hook, Fort at, N. J.*—P. O., tel., and R. R. stn. and stmbt. ldg. Sandy Hook, N. J., dist. 2.
- * *Scammel, Fort, Me.*—P. O., tel., and R. R. stn. Portland, Me., dist. 2 m.
- Schulyer, Fort, N. Y.* (Dept. East.)—P. O., tel., and R. R. stn. Westchester, N. Y., dist. $3\frac{1}{2}$ m.
- Selden, Fort, N. Mex.* (Dept. Ariz.)—P. O. and R. R. stn. (A., T. and S. F. R. R.) at post; tel. stn. Las Cruces, N. Mex., dist. 14 m.
- * *Seawall, Fort, Mass.*—P. O., tel., and R. R. stn. Marblehead, Mass., dist. $1\frac{1}{2}$ m.
- Shaw, Fort, Mont.* (Dept. Dak.)—P. O. and tel. stn. same; daily stage from Helena, Mont., on N. P. R. R., dist. 80 m.; and (summer) from stmbt. ldg., Benton, Mont. dist. 60 m.
- Sheridan, Camp, Wyo.* (Dept. Dak.)—P. O. Mammoth Hot Springs, Wyo.; tel. stn. Mammoth Hot Springs (summer) and Livingston, Mont. (winter); R. R. stn. Cinnabar, Mont., on Yellowstone Park Line of N. P. R. R.; dist. 8 m.
- * *Ship Island, Miss.*—P. O., tel., and R. R. stn. (N. O. and M. R. R.) Biloxi, Miss., dist. 15 m.; special boat to post.
- Sidney, Fort, Nebr.* (Dept. Platte.)—P. O., tel., and R. R. stn. Sidney, Nebr., on U. P. R. R.
- Still, Fort, Ind. T.* (Dept. Mo.)—P. O. and tel. stn. same; stage daily from Henrietta, Tex., on Ft. W. R. and D. R. R., dist. 65 miles.
- Sisseton, Fort, Dak.* (Dept. Dak.)—P. O. same; tel. and R. R. stn. Webster, Dak., on Hastings and Dakota Division of C. M. and St. P. R. R., dist. 23 m.; stage to post daily except Sunday.
- Snelling, Fort, Minn.* (Dept. Dak.)—P. O., tel., and R. R. stn. same.
- Spokane, Fort, Wash. T.* (Dept. Columbia.)—P. O. Miles, Wash. T.; tel. stn. at post; tri-weekly stage from Spokane Falls, on N. P. R. R., dist. 65 m., and from Sprague, on same R. R., dist. 50 m.
- Stanton, Fort, N. Mex.* (Dept. Ariz.)—P. O. and tel. stn. same; stage from Carthage, N. Mex., on A., T. and S. F. R. R., dist. 100 m.
- * *Stevens, Fort, Oreg.*—P. O. Astoria, Oreg.; daily steamer from R. R. stn. Portland, Oreg., to Astoria, dist. 98 m.; from thence by steam tug daily (except Sunday) to post, dist. 7 m.
- St. Francis Barracks, Fla.*—(Dept. East.)—P. O. tel., and R. R. stn. St. Augustine, Fla.
- * *St. Philip, Fort, La.*—P. O. Neptune, La.; tel. stn. Quarantine, La.; steamer tri-weekly from New Orleans, dist. 73 m.
- Sully, Fort, Dak.* (Dept. Dak.)—P. O. and tel. stn. same; tri-weekly buckboard from Pierre, Dak., on C. and N. W. R. R., dist. 25 m.
- * *Sumter, Fort, S. C.*—P. O. Moultrieville, S. C., tel. and R. R. stn. Charleston, S. C., dist. 5 m.
- Supply, Fort, Ind. T.* (Dept. Mo.)—P. O. Camp Supply, Ind. T.; tel. stn. at post; daily stage (except Saturday) from New Kiowa, Kans., on Southern Kans. R. R., dist. 76 m.
- * *Taylor, Fort, Fla.*—P. O. tel. stn., and boat ldg., Key West, Fla.
- Thomas, Fort, Ariz.* (Dept. Ariz.)—P. O. and tel. stn. same; buckboard six times a week from Bowie Station, on S. P. R. R., dist. 65 m.
- Totten, Fort, Dak.* (Dept. Dak.)—P. O. and tel. stn. same; daily mail from Devil's Lake, terminus of G. F. and D. L. Branch of St. P., M. and M. R. R., dist. 14 m.; summer by stmbt., winter over ice; and tri-weekly stage from Minnewauken, on Jamestown Branch N. P. R. R., dist. 16 m.
- Townsend, Fort, Wash. T.* (Dept. Columbia.)—P. O. and tel. stn. Port Townsend, Wash. T.; special conveyance from Port Townsend, dist. 3 m.
- Trumbull, Fort, Conn.* (Dept. East.)—P. O., tel., and R. R. stn., New London, Conn., dist. 1 m.
- Uncompahgre, Cantonment on, Colo.* (Dept. Mo.)—Tel. stn. same; P. O. Uncompahgre, Colo.; stage daily from Montrose, Colo., on D. and R. G. R. R., dist. 8 m.
- Union, Fort, N. Mex.* (Dept. Ariz.)—P. O. and tel. stn. same; daily stage or buckboard from Watrous, N. Mex., on A., T. and S. F. R. R., dist. 9 m.
- Vancouver Barracks, Wash. T.* (Dept. Columbia.)—P. O., tel. stn., and boat ldg. at Vancouver, Wash. T.; boat from Portland, Oreg., daily.
- Verde, Fort, Ariz.* (Dept. Ariz.)—P. O. and tel. stn. same; tri-weekly stage and buckboard, via Prescott, from Ash Fork, Ariz., on A. and P. R. R., dist. 97 m.; and from Maricopa, on S. P. R. R., via Phoenix, dist. 130 m.
- Wadsworth, Fort, N. Y.* (Dept. East.)—P. O. Stapleton, N. Y.; tel. stn. Quarantine, Clifton, Staten Island, N. Y.
- Walla-Walla, Fort, Wash. T.* (Dept. Columbia.)—P. O., tel., and R. R. stn. (O. R. and N. Company, connecting with N. P. R. R.) Walla-Walla, Wash. T., dist. 1 m.
- Warren, Fort, Mass.* (Dept. East.)—P. O., tel., and R. R. stn. Boston, Mass.; steamer from Boston, dist. 7 m.

- Washakie, Fort, Wyo.* (Dept. Platte.)—P. O. same; tel. stn. Rawlins, Wyo.; daily stage (except Sunday) from Rawlins, on U. P. R. R., dist. 147 m.
- Washington Barracks, D. C.* (Dept. East.)—P. O., tel., and R. R. stn. Washington, D. C.
- * *Washington, Fort, Md.*—P. O. same; tel. stn. Alexandria, Va.; stmbt. from Washington, D. C., dist. 13 m.
- Wayne, Fort, Mich.* (Dept. East.)—P. O. and tel. stn. Detroit, Mich.; city railway from Detroit, dist. 4 m.
- West Point, N. Y.* (U. S. Mil. Acad.)—P. O., tel., and R. R. stn. same.
- Whipple Barracks, Ariz.* (Dept. Ariz.)—P. O. Prescott, Ariz.; tel. stn. at post; stage daily from Ash Fork, on A. and P. R. R., dist. 54 m., and from Maricopa, on S. P. R. R., dist. 130 m.
- Willels Point, N. Y.* (Engineer School of Application.)—P. O., tel., and R. R. stn. White-stone, N. Y., dist. 2½ m. (See also Engineer Depot.)
- * *Winfield Scott, Fort, Cal.* (Dept. Cal.)—P. O. and R. R. stn. San Francisco; tel. stn. Presidio of San Francisco, Cal.
- Wingate, Fort, N. Mex.* (Dept. Mo.)—P. O. same; tel. and R. R. stn. (A. and P.) Win-gate, dist. 3 m.
- * *Winthrop, Fort, Mass.*—P. O. and tel. stn. Boston, Mass.; stmbt. from Boston, dist. 2 m.
- Yates, Fort, Dak.* (Dept. Dak.)—P. O. and tel. stn. same; buckboard (60 m.) and stmbt. (90 m.) from Bismarck, Dak., on N. P. R. R.; and from Mandan, on N. P. R. R., dist. 58 m.

ARMORIES, ARSENALS, AND DEPOTS.

ARMORIES, ARSENALS, AND ORDNANCE DEPOTS.

- * *Allegheny Arsenal, Pa.*—P. O., tel., and R. R. stn. Pittsburg, Pa.; Maj. G. W. McKee, comdg.
- Augusta Arsenal, Ga.*—P. O., tel., and R. R. stn. Augusta, Ga., dist. 3 m.; Maj. J. W. Reilly, comdg.
- Benicia Arsenal, Cal.*—P. O., tel., and R. R. stn. Benicia, Cal., dist. 1 m.; Col. Silas Crispin, comdg.
- Cheyenne Ordnance Depot, Wyo.*—P. O., tel., and R. R. stn. Cheyenne, Wyo.; Capt. W. S. Starring, comdg.
- Fort Abraham Lincoln Ordnance Depot, Dak.*—P. O. and tel. stn. Fort Abraham Lincoln, Dak.; boat landing at the fort and buckboard daily from Mandan, on N. P. R. R., dist. 7 m.; Capt. John Pitman, comdg.
- Fort Leavenworth Ordnance Depot, Kans.*—P. O., tel., and R. R. stn. (M. P. R. R., and C. R. 1., and P. R. R.) at Fort Leavenworth, Kans.; Capt. J. E. Grier, comdg.
- Fort Monroe Arsenal, Va.*—P. O. and tel. stn. Fort Monroe, Va.; stmbts. daily from New York, Baltimore, Washington, and Norfolk, and railroad (C. and O.) from Richmond; Maj. L. S. Babbitt, comdg.
- Frankford Arsenal, Pa.*—P. O. Station F, and tel. stn. (telephone to post) Philadelphia, Pa.; Bridesburg, on P. R. R., dist. ¼ m.; Lieut. Col. D. W. Flagler, comdg.
- Indianapolis Arsenal, Ind.*—P. O., tel., and R. R. stn. Indianapolis, Ind.; Maj. Clifton Comly, comdg.
- Kennebec Arsenal, Me.*—P. O., tel., and R. R. stn. Augusta, Me.; Maj. F. H. Phipps, comdg.
- National Armory, Mass.*—P. O., tel., and R. R. stn. Springfield, Mass.; Lieut. Col. A. R. Buffington, comdg.
- New York Arsenal, N. Y.*—P. O. and tel. stn. Governor's Island, N. Y.; Government steamer from New York City, dist. 1½ m.; Col. Julian McAllister, comdg.
- Rock Island Arsenal, Ill.*—P. O. and tel. stn. Rock Island, Ill.; special conveyance from R. R. stns. and boat ldfs. in Rock Island, Ill., and Davenport, Iowa, dist. 2 m.; Lieut. Col. T. G. Baylor, comdg.
- St. Louis Powder Depot, Mo.*—P. O., tel., and R. R. stn. Jefferson Barracks, Mo.; Capt. J. A. Kress, comdg.
- San Antonio Arsenal, Tex.*—P. O., tel., and R. R. stn. San Antonio, Tex.; Maj. Isaac Arnold, comdg.
- U. S. Powder Depot, N. J.*—P. O., tel. (telephone to post), and R. R. stn. Dover, N. J., dist. 4½ m.; Maj. J. P. Farley, comdg.
- Vancouver Barracks Ordnance Depot, Wash. T.*—P. O., tel. stn., and boat ldg. at Van-couver, Wash. T.; boat from Portland, Oreg., daily; Capt. A. H. Russell, comdg.
- Watertown Arsenal, Mass.*—P. O., tel., and R. R. stn. Watertown, Mass.; Maj. F. H. Parker, comdg.
- Waterliet Arsenal, N. Y.*—P. O. and tel. stn. West Troy, N. Y.; R. R. stn. East Troy, N. Y., dist. 1 m.; Lieut. Col. J. M. Whittemore, comdg.

RECRUITING DEPOTS.

Columbus Barracks, Ohio.—P. O. and R. R. stn. Columbus, Ohio; tel. stn. at post; Maj. W. L. Kellogg, 19 inf., comdg.
Dauids Island, N. Y.—P. O. Pelham, N. Y.; tel. stn. New Rochelle, N. Y.; stage and boat from New Rochelle, on N. Y., N. H. and H. R. R., dist. 2 m., or from Grand Central Depot, N. Y. City, dist. 19 m.; Lieut. Col. R. F. O'Beirne, 15 inf., comdg.
Jefferson Barracks, Mo.—P. O., tel., and R. R. stn. same; Maj. S. S. Sumner, 8 cav., comdg.

ENGINEER DEPOT.

Willets Point, N. Y.—P. O., tel., and R. R. stn. Whitestone, Queens County, N. Y., dist. 2½ m., Maj. W. R. King, Engrs., in charge.

HEADQUARTERS OF REGIMENTS.

CAVALRY.

- | | |
|-------------------------------|-------------------------|
| 1. Fort Custer, Mont. | 6. Fort Bayard, N. Mex. |
| 2. Fort Walla-Walla, Wash. T. | 7. Fort Meade, Dak. |
| 3. Fort Davis, Texas. | 8. San Antonio, Tex. |
| 4. Fort Huachuca, Ariz. | 9. Fort McKinney, Wyo. |
| 5. Fort Riley, Kans. | 10. Fort Grant, Ariz. |

ARTILLERY.

- | | |
|--|---|
| 1. Presidio of San Francisco, Cal. | 3. Washington Barracks, Washington, D. C. |
| 2. St. Francis Barracks, St. Augustine, Fla. | 4. Fort Adams, R. I. |
| | 5. Fort Hamilton, N. Y. |

INFANTRY.

- | | |
|------------------------------|----------------------------------|
| 1. Angel Island, Cal. | 14. Vancouver Barracks, Wash. T. |
| 2. Fort Omaha, Nebr. | 15. Fort Buford, Dak. |
| 3. Fort Shaw, Mont. | 16. Fort Concho, Tex. |
| 4. Fort Cœur d'Alene, Idaho. | 17. Fort D. A. Russell, Wyo. |
| 5. Fort Keogh, Mont. | 18. Fort Hays, Kans. |
| 6. Fort Leavenworth, Kans. | 19. Fort Clark, Tex. |
| 7. Fort Laramie, Wyo. | 20. Fort Assinniboine, Mont. |
| 8. Fort Lowell, Ariz. | 21. Fort Sidney, Nebr. |
| 9. Whipple Barracks, Ariz. | 22. Fort Lewis, Colo. |
| 10. Fort Bliss, Tex. | 23. Fort Wayne, Mich. |
| 11. Fort Sully, Dak. | 24. Fort Supply, Ind. T. |
| 12. Madison Barracks, N. Y. | 25. Fort Snelling, Minn. |
| 13. Santa Fé, N. Mex. | |

ADJUTANT-GENERAL'S OFFICE,

Washington, D. C., October 1, 1886.

G.—Casualties from U. S. Army during the fiscal year ending June 30, 1886.

Organization.	Discharged.						Retired.	Died.	Deserted.
	Expiration of service.	For disability.	General court-martial.	By civil authority.	By order.				
					Minority.	Other causes.			
Divisions and departments.....	30	1				151		3	
Engineer Corps.....	37	8	7		5	10	1	4	72
Ordnance Corps.....	80	4	3			13	8	1	5
First Cavalry.....	105	30	16		7	9		7	36
Second Cavalry.....	100	13	29		3	7	3	3	55
Third Cavalry.....	74	29	23		7	17	1	6	61
Fourth Cavalry.....	65	22	23		6	11	1	6	49
Fifth Cavalry.....	60	40	21		8	6	2	4	49
Sixth Cavalry.....	88	18	27		7	10		8	93
Seventh Cavalry.....	89	23	22		1	14		4	66
Eighth Cavalry.....	84	28	16		2	6		10	52
Ninth Cavalry.....	123	20	16		1	5		4	34
Tenth Cavalry.....	65	14	19			5		9	12
First Artillery.....	93	13	12		1	6	2	3	32
Second Artillery.....	86	22	18		6	8	5	7	44
Third Artillery.....	93	29	21	2	3	15	1	4	51
Fourth Artillery.....	72	14	11		2	12	4	1	50
Fifth Artillery.....	54	14	17		1	12	2	2	42
First Infantry.....	67	9	15		2	6		3	21
Second Infantry.....	92	12	10		1	9		1	22
Third Infantry.....	80	27	15		1	2	1	2	50
Fourth Infantry.....	53	13	26		2	6		2	21
Fifth Infantry.....	97	12	17		3	7	2	3	49
Sixth Infantry.....	67	16	19			5	1	3	52
Seventh Infantry.....	88	11	10		7	3	1		36
Eighth Infantry.....	62	10	8			7	1	3	18
Ninth Infantry.....	54	16	16		1	5	2	3	44
Tenth Infantry.....	44	8	17		3	4		7	77
Eleventh Infantry.....	51	3	13		2	8		1	40
Twelfth Infantry.....	32	4	13		2	5	1	3	28
Thirteenth Infantry.....	59	19	15		5	6	2	4	30
Fourteenth Infantry.....	78	12	11		3	3	1	3	28
Fifteenth Infantry.....	70	6	11		2	3		2	25
Sixteenth Infantry.....	48	10	20		4	3	1	6	36
Seventeenth Infantry.....	103	18	17			3	1	2	34
Eighteenth Infantry.....	97	15	4		3			4	44
Nineteenth Infantry.....	89	16	27		1	4		4	42
Twentieth Infantry.....	120	10	4		1	7		3	16
Twenty-first Infantry.....	55	8	16			9	1	2	84
Twenty-second Infantry.....	72	13	14		5	3	1	1	34
Twenty-third Infantry.....	97	10	13		1	4		1	24
Twenty-fourth Infantry.....	110	9	7			2			2
Twenty-fifth Infantry.....	123	22	7		2	6		2	10
Signal Corps.....	93	3				45		4	2
Mounted service.....	6	36	71	1	23	37		9	217
General service.....	30	104	31		17	62		7	247
Detachments:									
West Point.....	36	3	1		1	6	5	2	2
Fort Leavenworth.....	22	3				6			1
Washington.....	3					15		1	
General non-commissioned staff.....	113	4	2			9	21	8	1
Total.....	3,609	804	751	3	152	617	72	182	2,090

RECAPITULATION.

Discharges.....	5,936
Deaths.....	182
Retirements.....	72
Desertions.....	2,090
Total loss.....	8,280

H.—Number of enlistments and re-enlistments in the United States Army, and the number of men gained from desertion during the fiscal year ending June 30, 1886.

Organization.	No. of enlistments.	No. of re-enlistments.	No. gained from desertion.
General service, division, and departments.....	19	24	7
Engineers.....	41	34	3
Ordnance.....	35	105	3
First Cavalry.....	12	12	15
Second Cavalry.....	1	18	18
Third Cavalry.....	16	16	13
Fourth Cavalry.....	7	7	7
Fifth Cavalry.....	2	15	18
Sixth Cavalry.....	2	13	28
Seventh Cavalry.....	22	28	22
Eighth Cavalry.....	26	26	10
Ninth Cavalry.....	15	15	8
Tenth Cavalry.....	4	11	7
First Artillery.....	5	39	12
Second Artillery.....	93	34	17
Third Artillery.....	46	73	17
Fourth Artillery.....	40	49	16
Fifth Artillery.....	58	41	11
First Infantry.....	13	13	3
Second Infantry.....	22	20	20
Third Infantry.....	19	19	8
Fourth Infantry.....	33	33	21
Sixth Infantry.....	23	23	15
Seventh Infantry.....	4	13	5
Eighth Infantry.....	3	24	8
Ninth Infantry.....	1	19	15
Tenth Infantry.....	22	14	20
Eleventh Infantry.....	20	20	17
Twelfth Infantry.....	48	11	9
Thirteenth Infantry.....	16	16	22
Fourteenth Infantry.....	39	39	8
Fifteenth Infantry.....	12	12	6
Sixteenth Infantry.....	12	12	14
Seventeenth Infantry.....	1	25	15
Eighteenth Infantry.....	41	41	6
Nineteenth Infantry.....	42	42	13
Twentieth Infantry.....	5	5	3
Twenty-first Infantry.....	2	16	7
Twenty-second Infantry.....	16	16	5
Twenty-third Infantry.....	53	42	11
Twenty-fourth Infantry.....	1	66	2
Twenty-fifth Infantry.....	48	48	2
Signal Corps.....	69	81	81
Detachments:			
West Point U. S. Military Academy.....	23	36	2
Fort Leavenworth Military Prison.....	7	20	20
Washington.....	1	1	1
General non-commissioned staff.....	1	113	1
Mounted recruiting service.....	1,358	103	107
General recruiting service.....	1,955	297	36
Departmental recruiting service, viz:			
California.....	203	76	76
Arizona.....	36	13	13
Columbia.....	91	29	29
Dakota.....	205	63	63
Missouri.....	275	40	40
Platte.....	134	41	41
Texas.....	142	31	31
Total.....	4,970	2,121	621

RECAPITULATION.

Enlisted.....	4,970
Re-enlisted.....	2,121
Gained from desertion.....	621
Total gain.....	7,712

REPORT OF THE INSPECTOR-GENERAL.

HEADQUARTERS OF THE ARMY,
INSPECTOR-GENERAL'S OFFICE,
Washington, D. C., October 6, 1886

SIR: I have the honor to submit for the information of the honorable Secretary of War and the Lieutenant-General commanding the Army, the following, my report as Inspector-General of the Army for the current year.

The last annual report, made by my predecessor in this office, Brig. Gen. Nelson H. Davis, is dated September 17, 1885, and immediately thereafter, upon September 20, 1885, General Davis was, after a long career of most honorable service, placed upon the retired list under the requirements of the law. Upon the 22d of September, 1885, I was appointed to succeed him, and since that time have been on duty here. On the same day Lieut. Col. Joseph C. Breckinridge was promoted to be colonel and inspector-general, Maj. Edward M. Heyl to be lieutenant-colonel, *vice* Breckinridge, and Capt. Henry J. Farnsworth, Eighth Cavalry, was appointed to fill the vacancy of major and inspector-general, caused by the promotion of Lieutenant-Colonel Heyl.

Inspector-General Col. Roger Jones has, throughout the year, as during previous years, continued on duty as inspector-general of the Division of the Atlantic and of the Department of the East, performing most efficient and valuable service, which has kept him constantly occupied. He has made numerous valuable suggestions, which have been communicated to the Lieutenant-General.

Inspector-General Col. Joseph C. Breckinridge was, on October 10, 1885, assigned to duty as inspector-general of the Division of the Missouri, and on October 20 he reported at division headquarters and took charge of his office. He has since that time been actively occupied with the numerous duties devolving on him.

Inspector-General Lieut. Col. Robert P. Hughes has continued on duty as inspector-general of the Division of the Pacific and the Department of California.

Inspector-General Lieut. Col. Edward M. Heyl has remained on duty as inspector-general of the Department of Texas.

Inspector-General, Maj. George H. Burton has continued as inspector-general of the Department of the Missouri.

Inspector-General Maj. Henry J. Farnsworth, who, at the time of his appointment, was serving in command of his troop in the Indian campaign in New Mexico, reported for duty in this office November 15, 1885, pursuant to orders from the War Department, and since that time has been on duty here. In addition to his regular duties in this office he has made a special investigation in the Department of the Columbia, ordered by the Secretary of War.

As will be seen from the foregoing, notwithstanding the increase in number of inspectors-general provided in the act approved February 5, 1885, there are not a sufficient number available for assignment to all the departments; and it has been necessary to continue on duty as acting inspectors-general the line officers specified below.

The law approved June 23, 1874, after enumerating the number and rank of officers of the Inspector-General's department, says: "The Sec-

retary of War may, in addition, detail officers of the line, not to exceed four, to act as assistant inspector-general: Provided, That officers of the line detailed as acting inspectors-general shall have all the allowances of cavalry officers of their respective grades." (Supplement to Revised Statutes, vol. 1, p. 100.)

The four officers detailed under this act, by General Orders No. 47, Adjutant-General's Office, 1885, have served since the last annual report, and are as follows:

Lieut. Col. Edwin C. Mason, Fourth Infantry, Department of Dakota.

Lieut. Col. Henry M. Lazelle, Twenty-third Infantry, Department of the Columbia.

Maj. William F. Drum, Fourteenth Infantry, Department of Arizona.

Maj. Robert H. Hall, Twenty-second Infantry, Department of the Platte.

The work that has been performed by the inspecting officers during the year has been very great, and it has been important work. All of the military posts have been thoroughly inspected by division or department inspectors, in addition to the inspections required by paragraph 1327, Army Regulations, and numerous special investigations have been conducted.

The money accounts of disbursing officers, amounting to many millions of dollars, have been regularly verified. The reports of these inspections are submitted herewith for transmittal to Congress, as required by act approved April 20, 1874. These verifications of money accounts, although few errors or irregularities have been detected, are none the less important, and their usefulness is appreciated by most officers who disburse public funds.

The discharge of these duties has kept the officers on the road away from their homes a great part of their time, and subjects them to an expenditure of their private means from 15 to 20 per cent. greater than the amount that is afterwards refunded to them under existing laws.

The four officers serving in the department by temporary detail are all gentlemen of high character and capacity and have performed their duties to the entire satisfaction of this office, and so far as I can learn, to the satisfaction of the commanders to whose staffs they are attached. I would be glad if they could be immediately transferred into the department, but as it is now, they are four field officers absent from their regiments, and they must feel the inconvenience of serving on a detail which may be terminated at any moment by a simple order. I therefore urgently request that the Secretary of War and the Lieutenant-General will use their influence with Congress to have six officers of the lowest grade in the department added to it. Four to replace the four field officers of the line now serving by detail and two as additional assistants in my office, where they are greatly needed.

The urgent necessity for permanent clerical assistance has so frequently been referred to by my predecessors and by all the officers of the department, that I deem it my duty to again invite attention to the subject.

The order of June 16, 1885, issued from the headquarters of the Army allowing each inspector-general and acting inspector-general at division and department headquarters one general service clerk, with rank of corporal, and one private as messenger, afforded temporary relief, but the acts of Congress approved June 30, and July 29, 1886, provides for a reduction of general service men, and, by existing orders, the as-

signment of the limited number authorized by those acts is left to the discretion of division and department commanders.

Nearly all of the varied duties devolving upon an inspecting officer demand an amount of clerical work, and unless he has sufficient clerical assistance, it is manifest that what he accomplishes must be incomplete and imperfect and his usefulness limited. No other branch of the staff is hampered in this way. A young captain in the Subsistence or Quartermaster's Department has all the assistance he demands, limited only by the amount of work he has to perform. The Inspector-General's Department alone is left with undefined and doubtful rights in this regard.

The Inspector-General being away from his office much of his time on duty, it is very necessary that he should leave an intelligent clerk in charge, who can answer all questions the general in command may ask. I therefore urgently recommend that Congress be requested to authorize that every officer of the Inspector-General's Department, when on duty, shall be allowed a clerk of class three and a messenger, the persons so authorized to be employed only upon public duty pertaining to the inspection branch of the service.

All reports and my own observation prove that the Army, as a whole, is in a very healthy and gratifying condition. There is not a bad or a poor regiment in it. Some regiments excel others in certain lines of instruction, but there is not one which could not be brought to the highest degree of excellence in any line of military duty belonging to its class in a very short time. The officers are sober and orderly, capable and intelligent, and ambitious to excel when an opportunity is afforded them. Small commands, depleted by details for all manner of work, take from them the possibility of showing what they could or would do, and must dampen their ardor.

The enlisted men are sufficiently intelligent and educated for all necessary purposes. They are as well set up and instructed in their drills as their opportunities will permit. They are orderly and subordinate and faithful in the discharge of their duties, and they endure the privations and hardships of their calling with commendable fortitude. No troops have ever undergone greater hardships than those operating against the hostile Apache Indians during the last year in New Mexico and Arizona with less complaint. The enlisted force of the Army is a most respectable body of men.

CLOTHING.

The clothing furnished to the Army is of the best quality, and is generally satisfactory. Whenever an article is found to be defective or unsatisfactory and a better one is proposed which meets with the approval of the Lieutenant-General, the Quartermaster's Department has shown great willingness to conform to the adopted improvements; so there is little just ground for complaint regarding the dress of soldiers. There is no lack of effort to make it what it should be.

To adjust the uniform drawn by an individual to his person, it has always been found necessary to keep a tailor employed in each company, who alters the uniforms at the expense of the men, and the charge for altering a suit or sometimes a garment averages, as a rule, \$4 or \$5. It is hardly fair that the soldier should be subjected to such a charge upon clothing which is supposed theoretically to be made up when issued to him. I therefore recommend that the company tailor be placed on extra duty in the Quartermaster's Department and paid 50 cents a day,

and that the clothes of the men be fitted free of charge to them, the tailor, while so employed, to be excused from all duty except proper roll-calls and inspections.

SUBSISTENCE.

The ration never was better either in quality or variety than it is now. There are of course complaints, as there always must be, of a failure in some article supplied to come up to the proper standard, but these failures are local and temporary and on proper representation are, I think, always rectified.

Some officers are of the opinion that, without increasing the cost or quantity of the ration, there might be issued an amount of fresh vegetables at certain places in lieu of other parts of the ration, thus saving the company the expense of purchasing them. This I think worthy of the consideration of the Commissary-General.

The issue of salt pork as a part of the ration is a matter of such universal and persistent complaint that I deem it my duty to call attention to it. Even if bacon is a little more costly to the Government, the demand for it is so general that I think it might be listened to.

In every company the necessary table furniture is purchased out of a fund formed by saving and scrimping the men's allowance of food, and I suggest that a simple and suitable allowance of mess furniture might be gotten up and issued by the Subsistence Department, to be accounted for as other public property.

Likewise, I have to recommend the enlistment of a competent cook for each troop, battery, company, and regimental band in the service, the men enlisted for this purpose to receive such extra-duty pay from the Subsistence Department as, with their pay and allowances as privates, will make their compensation amount to \$30 a month, the amount ordinarily paid cooks who prepare food for as large a body of men as a company; and further, that while thus employed they be excused from duty except proper roll-calls. The proper preparation of a soldier's food has so much to do with his health and happiness that I consider the matter worthy of attention.

DESERTION.

The matter of desertion and the means of suppressing this vicious crime continues to attract attention, as it has in years past. A great deal has been written, latterly, on this subject by thoughtful and intelligent persons, but most of the articles I have seen appear to me to be not practical and altogether sentimental.

The first glaring fact to be recognized is, that desertion is a most disgraceful crime, and until all good men and women in the land, and the judges of our civil courts are brought to regard it as such, not much can be done to diminish the extent of it. So long as military administration treats it as a less degrading crime than petty larceny, and so long as influential public journals publish, as they now do, that desertion is nothing but a breach of contract, only regarded as a crime by West Point men, who are supposed to be the embodiment of cruelty, it will flourish.

Among savage tribes of men, by virtue of an instinct that is universal, the strong and vigorous, when the band is threatened, will place themselves between the weak and helpless and the impending danger to shield these until a refuge and safety is found; and civilized races have, in every age, regarded it as the duty of all capable of bearing arms, if

need be, to lay down their lives in defense of the home and fireside of their kindred, and this position has been regarded as the post of honor. To fail in this duty or abandon this post of honor has always been regarded as a crime deserving of death or disgrace.

Whether men come into the military service by voluntary enlistment, by conscription, or by levy *en masse* of the whole population, the obligation is equally imperative, and the soldier who quits the post of duty assigned him or fails in its performance, commits a crime akin to treason, and is deserving of death or the most humiliating punishment.

Regarding desertion as a crime, the only way that has ever been discovered in the experience of men to discourage crime is to punish it; wherever it shows itself to stamp it out of existence. Crime will always exist, but by stern repression it can be kept down.

In our service I know of but two proper ways of punishing desertion in cases where the death penalty is not involved. One is to keep as many convicted deserters as can be cared for, at the larger military posts, to do the menial and most disgusting work of the command, in the sight of honorable soldiers, thus keeping their shame constantly before them and relieving good men of work they ought not to be called upon to perform. The other, to confine them with the most degraded convicts in the most severe prisons in the land.

In all cases the criminal should be marked, not cruelly, but distinctly, as a majority of school boys mark themselves, so that he cannot repeat his offense continually; and no deserter should ever again be permitted to enlist.

As a means of decreasing the evil of desertion, the military prison at Fort Leavenworth has shown itself to be an entire failure. General Sacket, Inspector-General, in his annual report made two years ago, comments on this failure exhaustively, and it is unnecessary to repeat what he then said. A longer experience confirms the opinions he then expressed, and I feel safe in saying that a large majority of officers, serving with troops, regard the military prison as encouraging military offenses, particularly desertion, rather than discouraging them. The prisoners are pampered, not punished in the way they should be. They are too comfortable, too well fed and cared for. They are not made to feel constantly that they are in disgrace, and, on their discharge, they go back to their friends not to have the finger of scorn ever afterwards pointed at them by their fellows, but as if returning from some honorable school of instruction. Such is the belief of officers generally. The Army is not intended as a reformatory for bad men. That duty rests upon other organizations in the community.

It is the reviewing authority, generally, which determines the place of confinement of a soldier sentenced by a court-martial; and it is the custom, I understand, when a man convicted of desertion is likewise convicted of petty larceny, owing to the fact that some public property in his possession is not found after his departure, to send him to a civil penitentiary as unworthy to associate with the deserter simply, who is sent to Fort Leavenworth. This is giving desertion a creditable consideration, which it does not deserve. I therefore recommend to the honorable Secretary that steps be taken to prevent any deserter from being sent to the military prison, and to prevent his confinement at any place being reduced to a less period than the time for which he enlisted.

With regard to the military prison itself, the quarterly inspections provided for by section 1348, Revised Statutes, have been regularly made, the last by Maj. G. H. Burton, inspector-general, on September

12, 1886. I visited the prison myself only a few days after the date of Major Burton's last visit, but confined myself to some general inquiries, his inspection having been thorough and complete. His report shows the affairs of the institution to be admirably conducted. As a manufacturing establishment of necessary articles for Army use, it appears to be as well organized and managed as it possibly could be, and no more capable or efficient officer to conduct its affairs could readily be found than its present commandant, Col. A. P. Blunt, of the Quartermaster's Department.

The military prison was established by act of Congress in the year 1873 for the safe-keeping and punishment of military convicts, and, after a fair trial, it has, in the opinion of a large majority of officers, failed to accomplish satisfactorily the purpose for which it was intended. I therefore recommend to the honorable Secretary that steps may be taken to discontinue it as a prison, and that the manufacturing plant, which has grown up with it, be transferred to the Ordnance Department, which, in the distribution of work in the Army, is exclusively the one designed to be a manufacturing department.

There are many capable officers in the Ordnance Department who have an abundance of leisure time on their hands, and by making the transfer, two quartermasters and four officers of the line would be released and restored to their legitimate posts of duty.

SCHOOLS.

It was remarked by my predecessor, General Davis, in his report of last year, that the post schools had not proved a success generally, so far as the enlisted men were concerned, while they had been beneficial in the instruction of children. The same condition of things continues to exist, and some officers have recommended that attendance at school of enlisted men be made compulsory. I am entirely opposed to anything of the kind. In the first place, knowledge cannot be crammed into a man against his will, and in the next, I doubt the legal right of the Government to compel mature men to attend school like children. If the enlisted men of the Army do not come up to a desired standard of mental attainment, the remedy should be found in the recruiting office, in the same way that the standard of physical fitness is kept up. While recruits are as easily obtained as they now are, I think it would be well to take none who cannot read and write, and I would further recommend that none but American citizens, either by birth or adoption, be enlisted. It is important to keep up the schools for the benefit of children and such enlisted men as choose to go to them.

POST CEMETERIES.

The condition of many of the post cemeteries is far from satisfactory, and the post authorities are without means to put them in a proper state of repair and neatness.

It is complained by officers and men that the graves of soldiers, dying now, do not receive the care that is bestowed on those of the men who died during the war which are in the national cemeteries, and it has been suggested that the more important post graveyards might be made national cemeteries of a lower grade, so as to receive the benefit given to those established by law.

There are difficulties, however, in bringing this about which cannot be overcome. To convert a post graveyard into a national cemetery

would transfer it from the control of the post commander to the Quartermaster-General, and subject it to the operation of imperative laws that would be inconvenient. It would prevent the interment in it of the wives and children of soldiers and of citizens employed about the post whom it might be desirable to bury there. I see no remedy for the evils complained of but to ask the Quartermaster-General, in estimating for funds for the national cemeteries, to ask for an additional sum, expressly for keeping the post burial places in order, the funds to be disbursed by him through the post quartermasters. This I recommend.

ARMY REGULATIONS.

There is no more urgent and crying need in the Army than a new revision of the Army Regulations, to make them conform to the changes which have been made and to the orders issued since the last revision.

The reasons urging this are so apparent to all that it is not necessary to enumerate them. In making such a revision I think it would be wise to omit much matter which encumbers the present edition which is to be found in other works of authority, and which is out of place in a hand-book given to officers and men for their daily guidance. This is the kind of book of regulations that is needed, and I recommend to the honorable Secretary that a board be convened to prepare one. It will take considerable time to accomplish the work, but every day's labor spent upon it will be useful.

A revision of the tactics, in which the instruction for each arm of service shall be treated according to the requirements of that arm by itself, without regard to a forced conformity to the school of another arm, is much needed.

TARGET PRACTICE.

There seems to be a growing belief amongst officers of this department, post commanders, and others, that entirely too much time is devoted to target practice, to the neglect of other equally important duties, such as the "setting up" of the soldier and drills.

The tendency seems to be to make a few expert shots with the rifle, to the neglect of other arms, instead of a well-instructed command with the weapons which men would be called upon to use in active service.

Reports show that but little attention is devoted to mounted-target practice with carbine and pistol, and that instruction in estimating distance and skirmish firing do not receive the attention they merit.

I am of the opinion that officers should not compete with enlisted men at target; they have an undue advantage over the enlisted men both in time for practice and amount of ammunition therefor. I would recommend separate classes, and that competition be limited to the department in which the troops may be serving.

On this subject Colonel Mason, acting inspector-general, Department of Dakota, in his annual report, says:

Target practice has been observed, and the pre-eminence given it over all other military exercises orders require. This practice is a severe tax on the troops in some cases, and particularly is it so on the company officers when but one or two are for duty. In many cases officers spend daily during the target season from five o'clock in the morning until late in the afternoon on the target-range, the men of the companies going and coming from their work as they are required. That the Army is obtaining a fair paper record as marksmen is doubtless true. It may be fairly questioned whether we are making well set-up, drilled, and disciplined soldiers at the same time. The remark frequently made, "If the man is a good shot I want him in my company," indicates that the other soldierly qualities are not held in as high es-

teem as heretofore. I think the opinion is gaining ground that target practice, as now conducted in the northern latitudes, where the period for out-door exercises is short, occupies more than its fair share in the military instruction of the soldier. It is equally as important that a cavalryman should know how to ride and take care of his horse, and that the infantryman should be well drilled and hardened by frequent marches for active service, as that he should be able to make a good score for his company.

Major Hall, acting inspector-general, Department of the Platte, remarks:

Target practice is pursued with great enthusiasm. All other duties, including drill and even discipline, are subordinated to it, and certainly no lack of energy was discoverable in the efforts of both officers and men to create a large figure of merit. I venture the opinion that skirmish firing at unknown distances should receive more attention, at the expense of some of the time now consumed in the known-distance practice.

Nearly all other inspectors concur in the views herein expressed.

In the last annual report of the Inspector-General the condition of the light or field artillery was spoken of as altogether unsatisfactory, and the same condition of things continues to exist, but I know that the Lieutenant-General has this matter under consideration and will rectify the evils complained of as soon as he can in the way which seems best to him. I will only say that in my opinion the practice of changing light-battery commanders at short intervals by detail in rotation can never work well.

Out of twelve captains of artillery, there will hardly ever be found more than four who, by reason of age, habits, and tastes, are fitted to be brilliant light-battery commanders, and the selection should be confined to these, and they should not be changed as long as they are efficient.

This branch of the service needs much fostering care. It has been the pride of the Army and it can be made so again.

COLLEGES.

Quite recently an order has been issued, requiring officers of the Inspector General's department to visit the colleges where Army officers are on duty, and to report upon the work that is being done. No such inspections have yet been made, but much good is anticipated therefrom

POLICE.

At every military post there is an amount of dirty work to be done which is quite necessary, but at the same time revolting to those who have to do it. It is the kind of work which in towns and villages is performed by night scavengers who are hired for the purpose. Where there are no convicted prisoners at a post, I recommend that such work be done by contract with persons not of the command.

Respectfully submitted.

A. BAIRD,

*Brigadier and Inspector General,
Brevet Major-General, U. S. Army.*

The ADJUTANT-GENERAL, UNITED STATES ARMY.

REPORT OF MAJOR-GENERAL SCHOFIELD.

HEADQUARTERS DIVISION OF THE ATLANTIC,
Governor's Island, New York Harbor, September 18, 1886.

SIR: In compliance with the instructions of the Lieutenant-General commanding the Army, I have the honor to submit the following report of operations in the Division of the Atlantic during the past year:

The last annual report of this division, dated October 7, 1885, was made by my distinguished predecessor, the late Maj. Gen. Winfield S. Hancock, whose death the Army have since been called upon to mourn. The Lieutenant-General commanding the Army exercised immediate command of this division from the date of General Hancock's death, February 10, until April 13, upon which latter day I assumed the command in obedience to orders from the War Department. In the short time during which the command has devolved upon me no military operations of importance have occurred, and the preceding part of the year was comparatively uneventful in that respect. This report will, therefore, be limited to a simple narration, from the official records, of the movements of troops which have taken place in the division.

Reference is respectfully made to the accompanying reports of the chief staff officers for the details of business transacted in their several departments.

MOVEMENT OF TROOPS.

Second Artillery.—Batteries B and H, of this regiment, which were in summer camp at Atlanta, Ga., broke camp November 29, and rejoined their permanent station, Fort Barrancas, Fla., November 30. The same batteries left Fort Barrancas July 11, of the present year, and returned to their summer encampment near Atlanta.

Third Artillery.—Light Battery C, Third Artillery, marched from Washington Barracks to Gettysburg, Pa., June 23 to 29, went into camp at Culp's Hill, near Spangler's Springs, and participated in the reunion, July 2, of the Veterans of the Third Army Corps. The battery broke camp July 5, and returned to its permanent station, arriving at the barracks July 9.

August 30, 1886, Battery D left Fort McHenry to march to Washington Barracks for long-range target practice. The battery arrived September 1, 1886.

Fifth Artillery.—In obedience to telegraphic instructions from the War Department, of August 5, 1885, Battery K, Fifth Artillery, left Fort Schuyler, New York Harbor, September 10, and proceeded to Riverside Park, New York, as guard over the tomb of the late General U. S. Grant. The battery returned to Fort Schuyler October 11, 1885, being relieved on that date by Battery I, which was in turn relieved by Battery E, November 16, 1885.

Battery E was relieved December 16, 1885, by Battery M, and returned to Fort Hamilton, New York Harbor, same day. Battery M was relieved February 15, 1886, by Battery L, and was in turn relieved by Battery I, which remained in camp until June 30, 1886, when, in compliance with orders from the War Department of January, 1886, Camp Grant was discontinued, and the military guard permanently removed.

Batteries A and H, from Fort Columbus, Battery I, and a detachment of Light Battery F, from Fort Hamilton, attended the funeral services of the late Major-General Hancock, in New York and at Norristown, Pa., February 13. They left their respective stations in the morning and returned in the evening, the detachment of the light battery having been to Norristown and the foot batteries to New York.

May 31, 1886, the band, Light Battery F, and Batteries F and L, from Fort Hamilton, and Battery E, from Fort Schuyler, under the command of Maj. Marcus P. Miller, participated in the Memorial Day services, Brooklyn, N. Y. They returned to their respective posts same day.

Owing to insufficient facilities for small-arm firing at the several artillery posts in New York Harbor, a camp of instruction in rifle practice was established at Creedmoor, L. I., on Saturday, July 10. The camp was commanded by Maj. Marcus P. Miller, and was occupied successively by all the foot batteries stationed in New York Harbor, as follows: Batteries B, H, and M, from July 10 to 17, 1886; Batteries C, K, and I, from July 17 to 24, 1886; Batteries A, E, and I, from July 24 to 31, 1886.

Twenty-third Infantry.—September 29, 1881, in accordance with telegraphic instructions from the Adjutant-General of the Army, a guard, consisting of one officer and ten enlisted men, was established at Lake View Cemetery, Cleveland, Ohio, over the tomb of the late President Garfield. On June 30, of the current year, the guard was withdrawn and rejoined its station, Fort Wayne, Detroit, Mich., July 1.

August 28, 1886, Company D left Fort Porter and arrived at Fort Niagara for duty in connection with the department and division rifle competitions.

TARGET PRACTICE.

The annual rifle competition of this division upon the new range at Fort Niagara has been completed. The contests at Creedmoor, in which riflemen of this division are engaged, are now in progress, and the Army contest at Fort Leavenworth is to occur next week. The results thus far reported have been highly satisfactory.

MISCELLANEOUS.

April 13, 1886, seventy-seven Chiricahua Indian prisoners reached Fort Marion, Saint Augustine, Fla., from Fort Bowie, Arizona. The prisoners were under guard of Company E, Eighth Infantry, which started *en route* to Fort Bowie April 16, 1886.

During the labor disturbances which threatened Cincinnati in the month of May last, Companies D and E of instruction, general service, Columbus Barracks, Ohio, under command of Lieut. Col. Robert H. Offley, Seventeenth Infantry, were ordered to Newport Barracks by the Secretary of War. They arrived May 6, and, order having been restored, left for Columbus Barracks May 16, 1886.

FIELD ARTILLERY.

I have the honor to repeat the recommendations heretofore made by me and by my predecessor in this command, that several batteries of field artillery be united at some suitable post for their better instruction. I believe this is considered by all artillery officers as one of the most desirable improvements that could be made in their arm of service.

FORTIFICATION AND ARMAMENT.

The subject of fortification and armament of the sea-coast has been so thoroughly discussed, and its great importance is now so fully and generally recognized, that nothing further need be added on that subject except to express my hearty concurrence in the plans submitted by the high Board organized under act of Congress.

I inclose herewith, in duplicate, the several reports of the staff corps at these headquarters, which exhibit, in detail, the operations of their respective departments during the year.

Very respectfully, your obedient servant,

J. M. SCHOFIELD,

Major-General, U. S. A., Commanding.

The ADJUTANT-GENERAL, U. S. ARMY,
Washington, D. C.

REPORT OF MAJOR-GENERAL TERRY.

HEADQUARTERS DIVISION OF THE MISSOURI,
Chicago, Ill., September 10, 1886.

SIR: I have the honor to submit the following report of affairs in this military division since the report of Major-General Schofield, my predecessor in command, made on the 9th of October, 1885.

The division still consists of the four Departments of the Platte, Texas, Dakota, and Missouri; the limits of the first three remain unchanged, but on the 30th day of November, 1885, by General Orders No. 121, A. G. O., the district of New Mexico was temporarily detached from the Department of the Missouri and attached to the Department of Arizona, in the Division of the Pacific, and subsequently on the 4th day of May, 1886, by General Orders No. 25 (current series), A. G. O., this transfer was made permanent.

The Department of the Platte, until the 13th day of April, 1886, was commanded by Brig. Gen. and Maj. Gen. O. O. Howard. On that day, in pursuance of General Orders No. 15, Headquarters of the Army (current series), General Howard relinquished the command, and on the 28th day of April, 1886, in obedience to the same order, Brig. Gen. George Crook assumed command.

Brig. Gen. D. S. Stanley has remained in command of the Department of Texas during the year.

The Department of Dakota was commanded by Brig. Gen. and Maj. Gen. Alfred H. Terry until the 2d day of April, 1886, when by General Orders No. 15, Headquarters of the Army (current series), he was relieved; he was succeeded, on the 6th of May, 1886, by Brig. Gen. Thomas H. Ruger.

The Department of the Missouri remained under the command of Brig. Gen. N. A. Miles until the 7th day of April, 1886, when by General Orders No. 15 (current series), A. G. O., he was relieved and Colonel (now Brigadier General) Thomas H. Ruger was assigned to the temporary command of it. On the 28th day of April, 1886, by General Orders No. 21 (current series), A. G. O., General Ruger was relieved and Brig. Gen. Joseph H. Potter was assigned to the command.

On the 9th day of April, 1886, in pursuance of General Orders No. 15, Headquarters of the Army (current series), A. G. O., Major-Gen-

eral Schofield relinquished the command of the division and it was assumed by myself.

The transfer of the district of New Mexico to the Department of Arizona diminished the number of troops serving in the division by the Thirteenth Infantry, seven companies of the Twenty-second Infantry, six companies of the Tenth Infantry, eleven troops of the Sixth Cavalry, and four troops of the Eighth Cavalry.

In addition to these organizations, and in pursuance of General Orders No. 40, Headquarters of the Army, A. G. O., June 23, 1886, the Ninth Infantry was, on the 20th day of July, 1886, transferred from the Department of the Platte to the Department of Arizona—and as a consequence to the removal of the Ninth—the Seventeenth Infantry, by General Orders No. 12 (current series), from these headquarters, was transferred from the Department of Dakota to the Department of the Platte.

One other regiment has left the division during the year—the Fourth Infantry—which, by General Orders No. 24, Headquarters of the Army, A. G. O., May 1, 1886, was transferred from the Department of the Platte to the Department of the Columbia; but its place in the Department of the Platte was supplied by the Second Infantry, which, by the same order, was transferred from the Department of the Columbia.

The present distribution of the troops of the division to the several departments and the distribution of the troops of the departments to posts is shown by the accompanying roster.

The past year has been a year of unusual quiet in the division, especially quiet in the Departments of Texas and Dakota. General Stanley in his annual report says that “the past as compared with former years has been a year lacking in events,” and General Ruger reports that “a state of quiet, in a general sense, has prevailed during the past year, but operations of a minor nature have been necessary to suppress predatory raids by Indians belonging on reservations, directed principally against Indians of other reservations, the tribes mostly concerned being the Crows, Piegons, and Yanktonnais Sioux in Montana—and also raids by foreign Indians from the Canadian Northwest Territory against the Piegons, Gros Ventres, and Crows, in Montana. Some duty has also been required of the troops, relative to the preservation of neutrality along the northern boundary, but in each instance it was found that rumors and representations of actual or intended violations of neutrality by persons from our territory had no foundation in reality.”

The most important event of the year in the Department of the Platte is the establishment of the new post to which, for convenience' sake, the temporary name of Fort Du Chesne has been given. This post is situated about three miles above the junction of the Du Chesne and Uintah Rivers, on a site selected by General Crook in person, and is garrisoned by two troops of the Ninth Cavalry taken from Fort McKinney, one company of the Twenty-first Infantry taken from Fort Sidney, Nebraska, and three companies of the same regiment from Fort Fred Steele, the whole being under the command of Maj. F. W. Benteen of the Ninth Cavalry. These troops are now engaged in hutting themselves for the winter.

At present the route in use for communication with the new post is from Carter Station, on the Union Pacific Railroad, through Fort Bridger, and by it supplies for the troops are being forwarded; but probably a better route is that from Price Station, on the Denver and Salt Lake Branch of the Denver and Rio Grande Railroad, 125 miles south of Salt Lake City and about 71 miles from the post.

The greater number of the troops that, in September of last year, were sent to Rock Springs and Evanston, on the Union Pacific Railroad for the protection of the Chinese miners at those points, was withdrawn in the latter part of the succeeding October, but two companies of infantry were left at Rock Springs and one was left at Evanston. These companies were sheltered during the winter and are still sheltered in buildings provided by the railroad company. It has not been considered hitherto and it is not now considered prudent to withdraw them from these stations.

On the 1st of June last, under orders from the Lieutenant-General of the Army, a company of the Sixth Infantry was sent from Fort Douglas to the southeastern part of Utah to co-operate with a troop of the Fifth Cavalry, sent under similar orders to Southwestern Colorado, by the commanding general of the Department of the Missouri for the purpose of preserving the peace and protecting the lives and property of settlers in the region adjacent to the Blue Mountains, and in Dolores and La Plata Counties in Colorado. This company has been encamped during the summer on the North Fork of Montezuma Creek; the troop of cavalry has been encamped at Morgan's Mills on Lost Cañon Creek. All Indians in the vicinity of these troops have been quiet and peaceable during the summer; no depredations or acts of hostility have been reported.

General Potter's summary of the operations of the troops in the Department of the Missouri is as follows, viz:

The work of removing cattle from the Cheyenne and Arapaho Reservation, ordered by the President's proclamation, was completed by the end of December. During the entire spring and summer scouting parties have been frequently sent out from the posts of Fort Elliott, Supply, Sill, and Reno, for the purpose of expelling intruders from the Indian Territory and guarding against renewed intrusions; conducting unauthorized cattle therefrom; keeping herds, being driven through the Territory, on the authorized trails, and guarding these trails; quelling troubles between Indians and between cattlemen and Indians, and preventing Indians, from roaming off their reservations. To further these objects a troop of cavalry has been and is now at each of the following places: Chilocco Creek, Indian Territory, Cantonment, Indian Territory, and on the Washita River, east of Fort Elliott. Troop F, Fifth Cavalry, from Fort Supply, has also been detached for duty in Oklahoma.

The reports during the past month satisfy me that all the objects aimed at have been accomplished. This is due in no small degree to the cordial co-operation between commanding officers of posts and detachments, and Capt. J. M. Lee, Ninth Infantry, acting agent of the Cheyenne and Arapaho Indians, and to many valuable suggestions furnished by this officer.

Detachments have also been sent out to stop the cutting of timber in the Indian Territory.

In February a band of Kiowas reported to be committing depredations in Greer County, Texas, was taken back to their reservation by a troop of the Third Cavalry.

In June reported troubles between the settlers in the vicinity of the Kickapoo and Pottawatomie Reservations in Northeastern Kansas and the Indians of these tribes with reference to the grazing of cattle on Indian lands, were settled by dispatching a detachment of cavalry from Fort Riley, the commander of which acted in co-operation with the agent. The settlers agreed to pay a stipulated price per head for the use of Indian land for grazing purposes.

Pursuant to instructions from headquarters Division of the Missouri, Troop D, Fifth Cavalry, was detached to Southwestern Colorado in June last and is now encamped at Morgan's Mills, on Lost Cañon Creek, Colorado, there to protect settlers from Indian depredations, co-operating with troops sent to Southeastern Utah from the Department of the Platte. There have been no depredations in that vicinity by Indians and no apparent dissatisfaction on their part or tendency to commit depredations. I have recently visited the camp at Lost Cañon; during my stay there I learned that the Indians had been quiet and peaceful during the past year.

The attempts to intrude upon and occupy the "Oklahoma" lands, which last year were so persistent, and to defeat which such active effort on the part of the troops was required, seem, for the time at least,

to have ceased. General Potter, in addition to what he says on this subject in his annual report, forwards a report from Captain Price of the Fifth Cavalry, the commander of the camp on Chillico Creek, Indian Territory, in which, under date, of September 17, he says:

The "boomers" have generally gone to work on the railways now building on the State line and across the Indian Territory. Their recognized leaders—including Couch—have personally assured me that no further attempts will be made to occupy Oklahoma in opposition to the present policy of the Government; they will await and respect the decision of Congress. A few would-be leaders in this vicinity made efforts during the summer to create an excitement and secure followers, but they signally failed. The general sentiment on the border is to submit in a law-abiding spirit to the decision of rightful authority. I have not had occasion during the past month to exercise military authority outside my command; the country hereabouts is now as quiet and orderly as any part of Kansas.

Since the last annual report of the division was made, two posts within the division have been abandoned—Fort Fred Steele in the Department of the Platte, and Fort Ellis in the Department of Dakota; each of them had survived its usefulness.

One important addition—important in a military sense—to the routes of transportation in the division has been made during the past year: the extension of the Fremont, Elkhorn and Missouri Valley Railroad. At the date of the last report of my predecessor the western terminus of this road was at Chadron, in Nebraska, but during the year it has been extended to "Douglass Station," close to the site of old Fort Fetterman, in Wyoming, and a branch has been constructed northward from Chadron to Rapid City, in Dakota. The most western point to which freight can be shipped on the main line is at present "Lusk Station," but this station is less than one-half the distance from Fort Laramie that Cheyenne Station, on the Union Pacific Railroad, is, the point from which hitherto supplies for that post have been shipped. Lusk is also much nearer—though how much nearer I have as yet been unable to ascertain—to Fort McKinney than is Rock Creek, the station on the Union Pacific from which supplies for that post have hitherto been shipped.

It is understood that surveying parties are now in the field for the purpose of determining the feasibility of an extension of the road to Buffalo City, in the immediate vicinity of Fort McKinney. The extension of the Rapid City branch has brought Fort Meade, Dakota, within 30 miles of railway communication.

The reports of the inspectors-general of the division and the departments, and the reports of the other staff officers, which are forwarded by the commanding generals of the departments, show that the supplies furnished by the Quartermaster's, Subsistence, Medical, and Ordnance Departments have been ample in quantity and excellent in quality; that the troops have been promptly paid, and that their condition in respect to drill and discipline is generally good. The acting inspector-general of the Department of the Platte, however, reports that at the eleven posts inspected by him "the drill of the troops is defective and should receive more attention than is now given to it."

The insufficiency of the annual appropriations for barracks and quarters to keep the inhabited buildings at the posts in sufficiently good repair to make their inmates comfortable, is reported as usual.

As the annual rifle-practice season is not yet ended no comparison can be made between the results reached this year and those attained in previous years. It is, however, already known, that, as a rule, throughout the division target practice has been prosecuted with great spirit,

and that post and company commanders generally are entitled to much praise for the zeal and energy which they have displayed in giving to their men instruction in this the most important part of their training. Unfortunately, there are still some few officers who do not appreciate the transcendent importance of this instruction, and who permit themselves to discourage the efforts of those who do appreciate it, by the expressions of opinion adverse to its absolute or comparative utility. These officers fail to understand that during the last twenty years a revolution has taken place in the art of war, second in time but not second in importance to that produced by the invention of gunpowder—a revolution which is, in some sense, a counter-revolution to that which followed the introduction of fire-arms. Prior to the introduction of fire-arms the most important factor in determining the strength of an army was the individual skill in the use of arms of the men who composed it, and history is full of examples of the success of small bodies of men skilled in the use of their weapons over great masses of untrained men. But the invention of gunpowder changed all this. The early fire-arms, and indeed the arms in use until a recent period, were so rude in design and so imperfect in construction that no skill in their use could be obtained, or at least no skill in their use could make their fire rapid and accurate or in any degree effective beyond the most limited range.

As a consequence, attempts to train the great mass of armies—the infantry—to the skillful use of their arms were given up, and the object sought by training was the power to move and act in concert, the power to maneuver with speed and precision, and, until recently, the distinction between bodies of drilled and trained soldiers and bodies of raw recruits was not so much in the difference of their ability to use their arms effectively, as in the ability of the one and the inability of the other to act in concert—to maneuver.

The invention, however, of the breech-loading rifle—the unexpected development of its powers—and the still less expected demonstration of a fact that experience has already taught us, the fact that all men, with but very few exceptions, if properly and *systematically* instructed, will become effective shots, has effected a counter-revolution, and once again the most important factor in computing the strength of an army must be the individual skill of the men who compose it. This counter-revolution seems to have been recognized by all nations. Its recognition is shown by the strenuous efforts made everywhere to train soldiers in the use of their arms, and by the efforts made by every nation to increase the range, the accuracy, and the rapidity of fire of its military weapons.

In the present condition of the art of war it is an undeniable fact that untrained men are an incumbrance rather than a power on the battle-field.

I would not be understood as undervaluing the utility of other training; the very perfection of the new arm and the effectiveness of its fire demand increased mobility and the most thorough training in the movements prescribed by the tactics; I do contend for the paramount importance of this part of the soldier's instruction. Fortunately there is no conflict between the two. Our target season covers but four months of the year; with the preliminary theoretical instruction it occupies but five or six months, and even in these five or six months there is some time that may be devoted to other instruction. And if recruits at the beginning of their service are thoroughly set up and taught the elementary drill—and for the failure to so teach them there is absolutely

no excuse—the remaining six months of the year give ample time and opportunity for teaching them all that a soldier should know.

In Lieutenant-Colonel Blunt's manual we have an admirable system of instruction; if its methods are exactly and faithfully followed the best results are certain, but we have not yet developed its full power nor obtained all the benefits that we may derive from it. Our troops, as a rule, have but just entered upon the practice of company skirmish firing, a drill invaluable to officers as well as to men; a drill enabling the officer to school himself in the art of controlling his men while in action; a drill simulating better than all others the movements and incidents of actual conflict and instructing both officers and men in what has been aptly termed "fire discipline."

The troops have received from the War Department and from the Lieutenant-General commanding the Army every possible encouragement to earnest and zealous efforts to perfect their instruction in this respect, and I have no change to suggest in the general rules and orders that govern the matter, but there is one point to which I think I should call attention. Prior to 1883 it was difficult to induce many of the best marksmen to compete for the position of representative of the company in the department competitions. They would, of course, fire the prescribed number of shots, but in many cases the scores made were much below those which the men were known to be capable of making. The reason for this disinclination to win the position was well understood and often frankly acknowledged—the position entailed upon the representative expense that he was unwilling to meet. By General Orders No. 41, A. G. O., series of 1883, commutation of subsistence was allowed at the rate of \$1.50 per day to each representative selected not only while traveling to and from, but while at, the place of competition. The effect of this allowance was very marked; small as it is it gave a surprising stimulus to practice in the companies; it constituted a company prize, and the best shots earnestly competed for selection. Recent legislation has forbidden the payment of commutation while at the place of competition though still permitting it to be paid while traveling. I cannot but regard this change as unfortunate; its effect has not been felt this year; it came too late to be felt; but I am sure that it will be severely felt another year, and I earnestly recommend that legislation be asked for, that will permit a return to the former rule. The saving effected by withholding commutation from the men while at the place of competition can hardly exceed \$8,000 annually, and perhaps never before was an economy so small effected at so great a risk to a public interest so important.

Any discussion of the present methods and conditions of warfare and the instruction that they necessitate inevitably leads to conclusions in respect to our present state of preparation for hostilities, either offensive or defensive, upon which I, perhaps, ought not to speak, for they belong partly to the legislator and partly to the soldier, and so far as they belong to the soldier they come within the province of the Lieutenant-General commanding the Army rather than within the province of any of his subordinates; but these conclusions are so important that I venture to touch upon them. It is a proposition, that cannot be disputed, that it is no longer possible in any country to *improvise* an effective army. It is true that in times past there have been notable instances in which, in great emergencies, hastily raised levies, filled with enthusiasm and patriotic ardor, have successfully resisted trained and instructed troops, but there never has been a time, and it is quite safe

to say that there never will be a time, when hastily raised levies of untaught men have been able or will be able in the open field to endure and effectively reply to such fire as instructed troops, armed with modern arms, can deliver. Of course, hastily raised levies can be armed with modern weapons, but of what value will such weapons be in the hands of men who do not know how to use them, compared with their value in the hands of men who have been taught to develop all their power?

It is a prevalent notion that our country is full of men who, by reason of service in the late war, are prepared to take their places in line of battle, and that the Government has but to speak the word to call, as from the earth itself, hosts not only of men but of *soldiers*. Those who entertain this idea forget that the great military strength of every nation lies in its men who are between twenty and thirty-five years of age, and that men who were over twenty years of age at the termination of the civil war are over forty now, and, moreover, they forget the equally important fact that none of the troops of either party to that contest received the training in the use of arms that the existing conditions of war demand. Much stress is often laid upon the great adaptability of our people to the profession of arms, upon the readiness with which they acquire military training, and, as a proof of it, successes obtained in the early days of the civil war are cited, but it must be remembered that in those early conflicts the vanquished were as untrained as the victors and that, consequently, these instances prove nothing either for or against the necessity of training. We must take it for granted that in our future wars we shall have to contend against trained and instructed soldiers. Are we prepared with our present organization and force to meet the possibilities or, it may be said, the probabilities of the future? We have in addition to the Army small bodies of militia kept on foot by the States, some portions of which are well organized, admirably drilled, and in some degree trained in the use of arms; but notwithstanding the advantages that our geographical position gives us, they, combined with the Army, would be but an insignificant fraction of the force that would be needed in case of war with any powerful military nation. If time were given us to prepare we should have no reason to fear any nation, perhaps no reason to fear any combination of nations, but powers that keep constantly on foot large bodies of instructed troops do not give time when they have an unready enemy to attack.

Trained and instructed troops perform two functions at the outbreak of a war—they meet the first onset of the enemy, and they also furnish the instructors who train newly raised men. Our present Army, with the instructed militia added, would be entirely insufficient for the performance of these two functions. I do not suppose that it will ever be the policy of the country to maintain an army which from a purely military point of view would be sufficient to guard against the dangers to which the country must expect to be exposed in the future. Two objections to the maintenance of such a force seem to be insuperable in the minds of our people, the expense of maintaining it and the danger to which it might expose our liberties, but I submit that an army consisting of one man to each thousand of population would hardly be dangerous to the liberty of a people accustomed to self-government and habituated to local independent action, nor could it be a burden on the resources of any rich, industrious, and prosperous nation; and yet an army of that strength, organized in such manner as to permit a large expansion within itself at the outbreak of war, while it might not be

able of its own strength to meet the first shock of battle would at least supply a respectable nucleus around which the forces of the nation could be gathered, and would certainly be able to furnish a multitude of instructors to convert newly raised men into trained soldiers.

I have the honor to be, very respectfully, your obedient servant,
ALFRED H. TERRY,
Major-General.

The ADJUTANT-GENERAL OF THE ARMY,
Washington, D. C.

REPORT OF BRIGADIER-GENERAL CROOK.

HEADQUARTERS DEPARTMENT OF THE PLATTE,
Omaha, Nebr., September 4, 1886.

SIR: I have the honor to submit the following report of the operations of troops in the Department of the Platte since September 19, 1885, the date of the last annual report rendered. The department was at that time under the command of Brig. Gen. O. O. Howard, United States Army:

The troops ordered out by direction of the War Department, in consequence of disturbances between the whites and Chinese at Rock Springs, Wyoming, were, October 19, 1885, withdrawn to their respective stations, with the exception of three companies of infantry, which were left in permanent camps at Evanston and Rock Springs, Wyoming, one company at the former place and two at the latter. The camp at Evanston was (October 20, 1885) named Camp Medicine Butte; that at Rock Springs, Camp Pilot Butte.

Under orders from the Secretary of War the battery of light artillery at Fort Omaha, Nebraska, was, December 4, 1885, assigned to station at Fort Douglas, Utah. It moved the following day.

Maj. Gen. O. O. Howard, United States Army, relinquished the command of the department April 13, 1886. The command was assumed by me April 28, 1886, pursuant to orders from the War Department. In the interval between April 13 and 28, 1886, the department was commanded by Maj. Gen. A. H. Terry, United States Army, commanding the Division of the Missouri.

Col. A. McD. McCook, Sixth Infantry, with the regimental staff and band Sixth Infantry, left this department to take station in the Department of the Missouri. (Col. McCook left Fort Douglas May 6, and headquarters and band May 13.)

A rifle range was established May 19, 1886, near Bellevue, Nebr., on suitable land leased for the purpose, situated about 10 miles south of Omaha. It was named "Bellevue Rifle Range for the Department of the Platte and Fort Omaha."

Under instructions from the Lieutenant-General of the Army, a full company of infantry from Fort Douglas, Utah, was ordered to the southeastern part of Utah to protect the lives and property of settlers against Indian depredations and to explore and map the country. These troops started from Fort Douglas June 1, 1886, under command of Capt. D. H. Murdock, Sixth Infantry, and established a camp on the north fork of Montezuma Creek, Utah. Exploring parties from this camp have been actively at work throughout the summer. While crossing the Grand River, near Moab, Utah, Captain Murdock was drowned,

June 6, 1886, the service thus losing a most valuable and highly esteemed officer. The body, unfortunately, could not be recovered. I take pleasure in commending the gallant conduct of Private James Manning, Company B, Sixth Infantry, who braved the swift and treacherous waters of a swollen river in an unsuccessful attempt to rescue Captain Murdock, after having already taken one drowning soldier in safety to land.

In July, the fourth and ninth regiments of infantry were transferred from this department, their places being filled by the second and seventeenth regiments of infantry.

July 29, 1886, orders were received from the Lieutenant-General of the Army directing the establishment of a military post near the junction of the Du Chesne and Uintah Rivers, and in the vicinity of the agency of the Uncompahgre and White River Utes. Upon the suggestion of the Lieutenant-General of the Army, a suitable site was selected by me about three miles above the junction of the rivers named and on the road between Ouray and White Rocks; the agency of the Uintah Utes is at the latter point.

The post was established August 20, 1886, and was named Fort Du Chesne. To form its garrison under authority of the Lieutenant-General, I took two troops of cavalry from Fort McKinney, Wyoming, one company of infantry from Fort Sidney, Nebraska, and three companies of infantry from Fort Fred. Steele, Wyoming.

The troops of the department have during the year performed the usual duties incident to the service.

The number of troops serving in the department, according to the latest returns, is 2,694, comprising 162 officers and 2,532 enlisted men.

The general state of discipline is good.

Attention is invited to the reports* of the chiefs of staff bureaus on duty at these headquarters, hereto appended, marked 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, respectively, for information in regard to the administration and work of their several departments.

For report of the operations of troops under my command during the past twelve months and prior to April 28, 1886, attention is invited to Appendix I, hereto attached.

Very respectfully, your obedient servant,

GEORGE CROOK,

Brigadier-General U. S. Army, Commanding.

The ASSISTANT ADJUTANT-GENERAL, U. S. ARMY,

Headquarters Division of the Missouri, Chicago, Ill.

REPORT OF BRIGADIER-GENERAL STANLEY.

HEADQUARTERS DEPARTMENT OF TEXAS,

San Antonio, Tex., September 4, 1886.

SIR: I have the honor to submit in my annual report of the military affairs of this department, that the past year, as compared with former years, has been a year lacking in events. The duties of troops in Texas are mainly to keep themselves in such order, training, and discipline, as to fit themselves for service in any direction and in one hour's call, and to so completely patrol and watch the border line between the

* Omitted.

United States and Mexico that no violation of international law may occur without its being known to the United States authorities, and that measures be taken to correct any abuses within the legitimate control of the Army. I believe the troops of this department are in such a state as fulfills the first of these; the second condition, the thorough surveillance over the frontier, is a thing not so readily accomplished. Forts Davis and Clark and the post of San Antonio are posts for instruction and discipline, and from which troops are not often called for field service, and at these posts there is little interruption in drills and instruction, except during the hottest days of the year. From Fort Brown, on the Lower Rio Grande, to the western limit of the department, we have four permanent posts, and six sub-posts or stations, the troops stationed at which are charged with keeping watch upon the Mexican border; troops are constantly patrolling, and although lawlessness is not wholly restrained, it is kept down to petty stealing and smuggling. It has been an object in the allotment of garrisons for these Rio Grande posts, to reduce to the minimum number consistent with the proper guard upon our border. This is necessary, as subsistence, forage, and supplies generally are more costly upon the border than at interior posts. These posts referred to are now as much reduced in the size of their garrisons as can safely be done, and the frequency of disturbances will probably render an increase necessary. The post of Fort McIntosh is built just adjacent to the town of Laredo, Tex., with the small town of Nueva Laredo upon the opposite bank of the Rio Grande, and is connected with the American side by a costly railroad bridge, and communication made easy by numerous ferry-boats. In the month of April last a dispute arose in the American Laredo over the election of certain municipal officers of the town. These officers were of no great importance, but as both parties comprised many Mexicans, a war of words soon grew into a war of bullets. So long as this was confined strictly to the people of the town of Laredo the Army could take no legal part in suppressing the hostilities unless the riot became decidedly destructive, then only for humanity's sake and not as a right of law. But as soon as partisans from the Mexican side commenced to fill the ferry-boats with armed men, hurrying to the American side to join their friends in the fight, the commanding officer of Fort McIntosh, Brevet Lieut. Col. R. F. Bernard, Eighth Cavalry, promptly interfered. Double-quickening two companies of infantry into the town, he soon disarmed both parties, seized the ferry-boats, and at once rescued the citizens from the danger of murder, fire, and pillage. For his promptness in this matter, and which this officer conducted with great discretion, Colonel Bernard was thanked by the Secretary of the United States Treasury and the governor of Texas and received the gratitude of all good citizens. This case is related to illustrate the condition of all our garrison towns on the Rio Grande. All of them have Mexican towns immediately opposite, and a disturbance on one side soon communicates itself to the other, and the United States authority, backed by the troops, is the only force that can make itself respected. The turbulence of the population on each side of the river near and at Eagle Pass, the wholesale robbery and driving off of stock from both sides of the river, decided me to establish a military camp at the old station of Fort Duncan, and one troop of the Third Cavalry is now stationed there. The old site, on reservation of the old post, was accordingly leased at \$50 per month, and, as it would be advisable to occupy such of the old quarters as are needed by the troops, I advise such repairs of the quarters as will prevent their fall-

ing into ruin. The Lower Rio Grande is navigable for light-draught steamboats from its mouth to Rio Grande City, about 300 miles, and yet at low stages of water there are numerous and well-used fords, even upon this navigable section of the river. From Rio Grande City to El Paso the river is a mere thread of water some months in the year and in the dry seasons ceases to flow entirely. This great stretch of frontier line, 2,000 miles in extent, is occupied on either side by ranchmen, with herds of cattle, horses, and other domestic animals. When these ranchmen on different sides of the river are friendly all goes well. Unhappily, this is not always the case, and on either side of the border we find men always ready to take advantage of the letter of the law to enrich themselves and deplete their neighbors. As an example of these border troubles, last spring, about the month of May, four hundred cattle belonging to a ranchman below the old post of Fort Quitman, in Texas, strayed across the Rio Grande into Mexico, probably tempted by superior show of grass on the Mexican side. The owner of the range upon which the strayed cattle were trespassing called in the custom-house guards, who drove the cattle over a desert route to Presidio del Norte, the nearest customs port, nearly 100 miles distant. Here the owner is fined, or charged \$800 for his unavoidable bad luck, and is permitted to drive his cattle to his own place, minus one hundred calves starved to death on the cruel route. It happens to be our own fellow-citizen who suffers in this instance, but equally hard cases have happened to Mexican citizens, to their great distress. Surely diplomacy or even legislation should be exercised to remedy a state of affairs really disgraceful.

The military posts in this department, and especially those on the Rio Grande, are old, and can be kept habitable only by yearly repairs. At Forts Brown and McIntosh the stables and corrals are in a tumble-down condition, and ought to be rebuilt at once. The site of Fort Hancock (formerly Camp Price) is subject to overflow. It will be necessary this year to put up a levee protecting the post from high water; this can probably be done by an expenditure of \$1,000. Of late years it is believed the water supply at Fort Davis is becoming meager, and the water is thought to be impure. Much sickness has prevailed at this post for the past two summers; this is new and somewhat of a disappointment, as Fort Davis, with its temperate climate, has long been reckoned as a good sanitarium for Texas. If further experience shows the water to be unwholesome, measures must be taken to vacate the post. Fort Stockton, an interior post, being no longer necessary, was vacated June 30, and the buildings were turned over to the proper owner. Fort Concho, another interior post, might also be vacated but for the fact that with the present limited quarters in this department there is no other place to quarter the troops composing the garrison. Good progress has been made in building barracks and quarters at the new post of San Antonio, and it is hoped that an allotment from the appropriation for this year will enable us to continue the buildings so greatly needed.

A storm of great violence struck this part of San Antonio on the 20th of August. The damage was very serious and especially in unroofing twenty-odd large buildings. The experience of this storm convinces me that tin roofing is not the proper thing for a climate subject to hurricanes, and in replacing roofs the best cypress shingles have been substituted for tin. They are more durable than tin, and when painted make as tasteful an appearance.

Eight troops of cavalry belonging to this department are on detached service in other departments; four troops of the Eighth Cavalry have been more than a year in the Department of Arizona. As these troops are so far and so long separated from their proper stations it works great hardship upon both officers and men, and I recommend that these troops be relieved and returned to their proper stations as soon as practicable. Upon the general morale of the troops in Texas I believe the men are in good condition and the officers generally do their duties faithfully. Desertions always have occurred and always will occur, and to keep men employed and well fed are the only remedies I can suggest; after all, frailty is the common lot of mankind, and I never knew a deserter who was of any kind of use to the Army or to the community at large.

With the State authorities, and particularly with the militia of Texas, very friendly and pleasant associations have been experienced, and I have been able to send troops and a light battery to two encampments of the militia, held one at Lampasas and the other at Galveston. Through the liberality of the management these movements have been made without any cost to the United States. I believe the practice of associating regular troops with militia in their encampments to be beneficial to the troops and militia alike.

More frequent change to a northern climate would benefit the troops serving in Texas. One regiment, the Eighth Cavalry, have been in Texas, and in the warmest part of Texas, for eleven years, and although I would not decry the climate, which for nine months in the year I believe to be one of the finest in the world, there is doubt but long continued residence without change enervates the system and makes a change for all persons beneficial.

Accompanying this will be found reports of the assistant adjutant-general, chief quartermaster, chief commissary of subsistence, inspector-general, medical director, chief paymaster, chief ordnance officer, inspector of rifle practice, acting engineer officer, and judge-advocate. All of these reports contain matters of great interest to the military department and to the United States. The judge-advocate has just finished the work of completing the title to Fort Bliss, a matter outside of this department, but committed to his charge. This is a most excellent work, requiring great diligence and exertion, and this officer merits commendation for bringing this troublesome subject to a successful ending.

I am, very respectfully, your obedient servant,

D. S. STANLEY,

Brigadier-General, U. S. A., Commanding.

The ASSISTANT ADJUTANT-GENERAL,

DEPARTMENT OF THE MISSOURI, *Chicago, Ill.*

REPORT OF BRIGADIER-GENERAL RUGER.

HEADQUARTERS DEPARTMENT OF DAKOTA,

Fort Snelling, Minn., September 6, 1886.

SIR: I have the honor to submit the following report of military operations had in the Department of Dakota since the date of the last annual report, rendered September 16, 1885, by my predecessor in command, Maj. Gen. Alfred H. Terry, whom I succeeded on May 5, last.

A state of quiet, in a general sense, has prevailed during the past year, but operations of a minor nature have been necessary to suppress predatory raids by Indians belonging on reservations, directed principally against Indians of other reservations, the tribes mostly concerned being the Crows, Piegans, and Yanktonnais, Sioux in Montana, and also raids by foreign Indians from the Canadian Northwest Territory against the Piegans, Gros Ventres, and Crows in Montana. Some duty has also been required of the troops relative to the preservation of neutrality along the northern boundary, but in each instance it was found that rumors and representations of actual or intended violations of neutrality by persons from our territory had no foundation in reality.

The operations for the year are embraced in the summary of events which follows:

September 2, 1885, 30 men of Troop L, First Cavalry, Lieutenant Backus commanding, left Fort Assinniboine to pursue a party of Indians seen near the Bear Paw Mountains; trailed Indians through mountains and down Eagle Creek to Missouri River, where they crossed; reported not journeying with hostile intent. Detachment returned September 4.

September 4, 1885, 38 men of Troop F, First Cavalry, Lieutenant Bomus commanding, left Fort Maginnis to scout in the vicinity of Black Butte, Montana, for Indians with stolen stock. During scout, 13 Crow Indians with 38 horses were captured and taken to Fort Maginnis. Returned September 10. On September 11, Lieutenant Bomus, accompanied by Lieutenant Waters, Twentieth Infantry, with 24 men of Troop C, and 29 men of Troop F, First Cavalry, again left—this time to establish a camp at junction of Ford and Box Elder Creeks, with instructions to scout country from that point for horse-stealing Indians. Since establishment of camp, to September 30, 3 Indians were captured and sent to Maginnis. Still absent. Lieutenant Macdonald, First Cavalry, relieved Lieutenant Waters, Twentieth Infantry, with command. Returned October 29.

September 6, 1885, 36 men of Troop A and 13 of Troop C, First Cavalry, Captain Garvey commanding, left Fort Maginnis to scout country in neighborhood of Lewiston, Mont., west and south, for bands of marauding Indians. September 12, established camp at head of Buffalo Creek; since, to September 30, 7 ponies with equipments were captured. The country, for a distance of 10 to 25 miles in each direction from camp, patrolled daily. Still absent September 30. Lieutenant Robertson, First Cavalry, joined this command. Returned October 29.

September 8, 1885, 40 men of Troop H, First Cavalry, Lieutenant Morrison, Twentieth Infantry, commanding, left Fort Assinniboine to scout country between Bear Paw Mountains and mouth of Maria's River, for horse-stealing Indians. Six Indians were seen and ordered to stop, but refused and fired on the troops. After an interchange of several shots Indians fled; they were chased, but escaped under cover of night. The detachment made a thorough scout of the country indicated above, but finding nothing unusual returned September 16.

September 14, 1885, 25 men of Troop L, First Cavalry, Lieutenant Backus commanding, left Fort Assinniboine, and made a thorough scout in Bear Paw Mountains for marauding Indians; found everything quiet. Returned September 15.

September 17, 1885, Lieutenant Bontelle and 41 men of Troop D, First Cavalry, Captain Forse commanding, left Fort Custer to intercept certain small bands of Piegan Indians reported to have committed

depredations on the Crow Indian Reservation; arrived at and encamped on Soap Creek, about 6 miles from foot of Big Horn Mountains, September 18, and remained until September 28, during which time detachments were frequently sent out in various directions in search of the depredating Piegans; no signs or trails were found. September 28 crossed Big Horn River and scouted along its west bank to Fort Custer, with no better success. Arrived September 30. Distance traveled, 170 miles.

September 25, 1885, a battalion of the First Cavalry, consisting of Troops B, 35 men, Lieutenant Galbraith, and K, 39 men, Lieutenant Mills, Captain Jackson commanding, left Fort Custer to intercept a party of Crow Indians, reported as *en route* to their reservation with stock supposed to have been stolen from Piegan Indians. September 26, at Custer Station, the battalion divided, Troop B marching to Pompey's Pillar, and scouting between that point and Humbley, along Briar Creek to the old Telegraph Road; September 30, returned to Pompey's Pillar; here it encamped. No signs of Indians found during scout. Distance traveled, 137 miles. Troop K, under Lieutenant Mills, marched to Pease Bottom, and established permanent camp, from which scouting parties were sent out and pickets established at fords at head of Pease Bottom and Froze-to-death Creek; left that camp September 27, and marched to Froze-to-death Creek, scouting country adjacent thereto; returning to Pease Bottom September 30, where it encamped. No signs of Indians found during scout. Distance traveled, 113 miles.

September 26, 1885, 37 men of Troop H, and 25 of Troop L, First Cavalry, Lieutenant Morrison, Twentieth Infantry, Lieutenant Goode, First Cavalry, commanding, left Fort Assiniboine for Eagle Creek and Bear Paw Mountains, to intercept band of Crow Indians, reported to have crossed Yellowstone River, going north, with stolen stock. Up to September 30 the Indians had not been discovered. Still absent.

September 27, 1886, Lieutenant Landis and 40 men Troop G, First Cavalry, Captain Upham commanding, proceeded from Fort Custer to Terry's Landing and encamped. September 28, detachments of the troop were sent east and west on north bank of Yellowstone River, for the purpose of obtaining information relative to Crow Indians, who had left their reservation on raiding expeditions north. September 29, Captain Upham, with 9 men of his troop, captured 11 Crow Indians, with 87 horses, returning from the north, from a raid, crossing the ford of the Yellowstone River, at Buffalo Creek, three miles west of Custer Station, and brought them to camp that day. On September 30, upon information received that another party of Crow Indians were coming from the north, Lieutenant Aleshire, First Cavalry, who joined his troop that day, from leave, with eleven men, set out in pursuit and captured 17 Crow Indians, with 45 horses, near crossing of Yellowstone River at Buffalo Creek, and brought them to camp. Same day, September 30, the troop left Terry's Landing, with 28 Crow Indians and 132 horses, and marched to McNut's ranch, on the Big Horn River, where Indians and horses were turned over to Captain Harris, commanding Troop M, First Cavalry, for transfer to Fort Custer (2 horses were abandoned on account of exhaustion), Troop G having orders to return next morning to the Yellowstone.

September 30, 1886, Troop M, First Cavalry, Captain Harris commanding, left Fort Custer, and proceeded to McNut's ranch, on Big Horn River, to receive Crow Indian prisoners, with captured stock, from Captain Upham, *en route* with them to Fort Custer.

October 1, 1885, 20 men of Troop L, First Cavalry, Lieutenant Backus commanding, left Fort Assinniboine to scout the country between the Coal Banks and Maria's River, Montana, for horse-stealing Indians; none seen. Returned October 11. Distance traveled, 140 miles.

October 1, 1886, Troop M, First Cavalry, Captain Harris commanding, returned to Fort Custer with 28 Crow Indians, and 130 horses received from Captain Upham, First Cavalry, and turned them over to the commanding officer. The troop left for this purpose September 30.

October 2, 1885, 13 men of Twentieth Infantry, mounted on Indian ponies, Lieutenant Rogers commanding, left Fort Assinniboine for Box Elder Creek, Montana, to capture horse thieves; found their trail—apparently twenty-four hours old—useless to follow, the detachment having been poorly mounted. Returned October 5. Distance traveled, 76 miles.

October 7, 1885, the command which left Fort Custer September 25, under Captain Jackson, First Cavalry, returned to that post; nothing of importance to relate concerning it, other than that noted in record of September 25.

October 7, 1885, the command which left Fort Custer September 27, under Captain Upham, First Cavalry, returned to that post; nothing of importance having occurred, other than that noted in record of September 27.

October 11, 1885, 34 men of Troop H, First Cavalry, Lieutenant Goode, First Cavalry, commanding, returned to Fort Assinniboine; left that post September 26 (accompanied by Lieutenant Morrison, Twentieth Infantry), in command of a detachment from Troops H and L, First Cavalry, to intercept a band of Crow Indians, with stolen stock. The Indians were not discovered. Distance traveled, 290 miles. On October 10, Lieutenant Morrison, with detachment of Troop L, separated for duty elsewhere.

October 22, 1885, Troop K, First Cavalry, Lieutenant Byram, Lieutenant Boutelle commanding, left Fort Custer to intercept a horse-stealing party of Piegan Indians, reported as having crossed the Yellowstone River, near Gray Cliffs, traveling south; they were not discovered. Returned October 31. Distance traveled, 191 miles.

October 29, 1885, the command which left Fort Maginnis September 11, under Lieutenant Bomus, First Cavalry, to establish camp at junction of Ford and Box Elder Creeks, and scout for horse-stealing Indians, returned to that post. Seven Indians and 61 horses were captured during the month, and taken to Fort Maginnis.

October 30, 1885, 25 men of Troop L, First Cavalry, Lieutenant Morrison, Twentieth Infantry, commanding, returned to Fort Assinniboine; left that post September 26, under Lieutenant Goode, First Cavalry, to intercept band of Crow Indians with stolen stock. Ordered to Coal Banks on October 10 for duty in connection with investigation into alleged stealings by Piegan Indians.

November 22, 1885, Troop G, Seventh Cavalry, Captain Edgerly, and a detachment of the Fifth Infantry, Lieutenant Liggett, Major Snyder, Fifth Infantry, commanding, left Fort Keogh, to proceed to and quell a reported disturbance of Rosebud Indians at their agency at Tongue River, Montana. Before reaching the agency, Major Snyder learned from Indian Inspector Armstrong that no necessity existed for the presence of troops there, whereupon Major Snyder directed Troop G to return to its station, at which it arrived November 26, having traveled 110 miles; he, with a few men, continued on to the agency to further inves-

figate. His report confirms the statement that no necessity for troops or cause for alarm existed.

November 22, 1885, a battalion of the First Cavalry, consisting of Troops B, D, and M, First Cavalry, under command of Major Carroll, left Fort Custer to proceed to and suppress an Indian disturbance reported to have been then in progress at the agency of the Northern Cheyennes on Rosebud Creek, Montana. Found everything quiet at the agency, no outbreak having occurred; none anticipated. Returned to Fort Custer, November 28. Distance traveled, 114 miles.

December 9, 1886, a detachment of 32 men of Troop A, First Cavalry, Lieutenant Robertson commanding, left Fort Maginnis with a view of returning a roving band of British Cree Indians to their country. The Indians, numbering 120, were found encamped at Rocky Point, Montana, and, together with 17 found *en route* to Fort Assiniboine, were taken to that post and turned over to the commanding officer December 21. The party consisted of 51 men, 50 women, and 36 children. They had 30 ponies and 14 guns. "Little Poplar" and a son of "Big Bear" were principal men. Commanding officer Fort Assiniboine has reported that they are utterly destitute, and that he had issued to them subsistence to prevent starvation. The Fort Maginnis detachment returned to its station December 31, having marched 347 miles.

January 3, 1886, at Fort Custer, Montana, one double set of barracks, occupied by Troop B, First Cavalry, and in which the post library, telegraph office, carpenter, saddler, and tinsmith shops were located, was destroyed by fire. Origin of fire unknown; board of officers convened to investigate.

January 20, 1886, at Fort Custer, Montana, the stables belonging to Troop M, First Cavalry, were destroyed by fire. Fifty-three of the troop horses, and five belonging to troops of the First Cavalry at Fort Maginnis, were burned to death, and a considerable amount of other property destroyed. Origin of fire unknown; board of officers convened to investigate.

February, 1886, nothing to report.

March, 1886, nothing to report.

April, 1886, nothing to report.

May 7, 1886, a detachment of Troops H and L, First Cavalry, Lieutenant Backus commanding, left Fort Assiniboine, Montana, and proceeded to the vicinity of Warm Springs, Mont., to secure and bring to the post 3 horses reported to have been stolen from the Canadia mounted police by certain Cree Indians. Returned May 12, having secured one of the horses. Distance traveled, 30 miles.

May 8, 1886, a detachment of 31 men of Troop F, and 32 men of Troop L, Seventh Cavalry, Captain Bell commanding, left Fort Buford, Dakota, and removed from the reservation thereat about 1,600 head of trespassing cattle and turned them over to the owners. The detachment returned May 9. Distance traveled, about 40 miles.

June 16, 1886, Light Battery F, Fourth Artillery, Captain Smith commanding, left Fort Snelling on a march of instruction to New Ulm, Minn., there to encamp with the Second Regiment, Minnesota National Guard, June 23 to 30. Authority—letter from the Adjutant-General's office, May 28, 1886.

June 25, 1886, Lieutenant Maney, Fifteenth Infantry, with a detachment of 15 men of Troops F and L, Seventh Cavalry, left Fort Buford in pursuit of "Yellow Eagle," and six or more other Indians, who left Poplar Creek Agency, Montana, without permission, for the alleged purpose of procuring ammunition at O'Brien's ranch, situated about 25

miles from Fort Buford, on the road to Glendive, Mont., thence to go on a stock-stealing expedition to the Crow Indian Reservation. Inquiry of settlers and others in the vicinity of O'Brien's demonstrated that Indians up to that time had not been in that neighborhood; so detachment returned to post, arriving June 27. Distance traveled, about 50 miles. On June 28, upon information received at Fort Buford that these Indians were annoying settlers in the neighborhood of O'Brien's, Troop L, Seventh Cavalry, accompanied by Assistant Surgeon Finley, Captain Wallace, Seventh Cavalry, commanding, left that post in pursuit. At O'Brien's the troop was divided into four detachments, each to scout in a different direction, but each failed to find the Indians or indications of their recent presence, although the settlers claimed they had been in the neighborhood. June 30 troop encamped on Yellowstone River, near site of old Fort Gilbert.

July 1, 1886, Troop L, Seventh Cavalry, returned to Fort Buford from pursuit of "Yellow Eagle" and other Indians. It left Fort Buford June 28. Nothing transpired to record other than as reported during the month of June. Distance traveled, 115 miles.

July 4, 1886, Light Battery F, Fourth Artillery, returned to Fort Snelling. It left that post June 16, on a march of instruction to New Ulm, Minn.

July 10, 1886, a detachment of Troops G and K, First Cavalry, Lieutenant Byram, First Cavalry, commanding, left Fort Custer, Montana, on a scout to Tullock's Fork, Montana, to intercept a party of Piegan or Yankton Sioux, reported as journeying south for purposes of depredation. Detachment returned July 14, as no evidences were found establishing the truth of the report. Distance traveled, 115 miles.

The force in the department has been reduced by the transfer of the Seventeenth Regiment of Infantry to the Department of the Platte; and one post, Fort Ellis, Montana, has been discontinued.

In accordance with instructions proceeding from the War Department, Troop M, First Cavalry, Capt. Moses Harris commanding, took station on August 17, last, in the Yellowstone National Park, for performance, under direction of the Secretary of the Interior, of the duties before performed by the superintendent of the Park and his assistants.

The list of regiments serving in the department, the stations occupied, and the composition of their garrisons, are given in the register of troops accompanying this report.

The strength of the several garrisons, taken from the last completed July returns, is as follows:

Independent posts.

Posts.	Officers.	Enlisted men.	Indian scouts.
Fort Snelling.....	23	262	.....
Fort Sisseton.....	9	78	2
Fort Pembina.....	8	75	.....
Fort Totten.....	6	65	.....
Fort Randall.....	14	160	.....
Fort Sully.....	16	167	.....
Fort Bennett.....	3	34	2
Fort Yates.....	15	183	2
Fort Meade.....	36	500	.....
Fort Abraham Lincoln.....	6	43	.....
Fort Abraham Lincoln Ordnance Depot.....	1	7	.....
Fort Buford.....	23	278	.....
Camp Poplar River.....	7	80	2
Fort Keogh.....	32	301	.....
Fort Custer.....	28	378	.....
Total.....	227	2, 671	8

District of Montana.

Posts.	Officers.	Enlisted men.	Indian scouts.
Fort Assiniboine	35	426	2
Fort Shaw	16	207	
Fort Maginnis	17	211	
Fort Ellis	11	133	
Fort Missoula	15	179	
Total	94	1, 156	2

GRAND TOTAL.

Independent posts and district of Montana.	Officers.	Enlisted men.	Indian scouts.
Independent posts	227	2, 671	8
District of Montana	94	1, 156	2
Total	321	3, 827	10

Accompanying are reports by the officers of the general staff on duty at these headquarters, upon the operations for the past year in their respective departments.

Attention is respectfully requested to such reports, with reference to details of administration stated, and suggestions presented, therein. It appears from these reports, and from information otherwise obtained, that all requirements pertaining to the well-being and efficiency of the troops serving in the department have been as well met during the year as the means at command allowed.

The reports of the chief engineer officer and inspector of rifle practice are not herewith. The report of the latter will be forwarded as soon as it can be prepared after the close of the present season for practice in rifle firing; the report of the former so soon as he shall have returned from detached service, which has prevented its rendition.

Very respectfully, your obedient servant,

THOMAS H. RUGER,
Brigadier-General, Commanding.

The ASSISTANT ADJUTANT-GENERAL, U. S. A.,
Headquarters Division of the Missouri, Chicago, Ill.

REPORT OF BRIGADIER-GENERAL POTTER.

HEADQUARTERS DEPARTMENT OF THE MISSOURI,
Fort Leavenworth, Kans., September 7, 1886.

SIR: I have the honor to submit the following report of the condition of affairs in this department:

I assumed command of the department May 4, of this year, pursuant to General Orders No. 21, dated Headquarters of the Army, April 28, 1886.

OPERATIONS OF TROOPS.

The columns reported remaining in the field in Southern Kansas in September last, being a part of the forces called there by the threatening attitude of the Cheyenne and Arapahoe Indians, were returned to their proper stations during the latter part of that month, with the exception of Troops D, E, and L, Fifth Cavalry, which were retained in camp near Kiowa, Kans., until October, when they were ordered to join their permanent station at Fort Riley. Good order was restored among the Indians and the fears of an outbreak entertained by settlers allayed.

The work of removing cattle from the Cheyenne and Arapahoe reservation ordered by the President's proclamation was completed by the end of December. During the entire spring and summer scouting parties have been frequently sent out from the posts of Fort Elliott, Supply, Sill, and Reno, for the purpose of expelling intruders from the Indian Territory and guarding against renewed intrusions, conducting unauthorized cattle therefrom, keeping herds being driven through the Territory on the authorized trails, and guarding these trails, quelling troubles between Indians and between cattlemen and Indians, and preventing Indians from roaming off the reservations. To further these objects, a troop of cavalry has been and is now at each of the following places: Chilocco Creek, Indian Territory, Cantonment, Indian Territory, and on the Washita River east of Fort Elliott. Troop F, Fifth Cavalry, from Fort Supply, has also been detached for duty in Oklahoma.

The reports during the past month satisfy me that all the objects aimed at have been accomplished. This is due in no small degree to the cordial co-operation between commanding officers of posts and detachments and Capt. J. M. Lee, Ninth Infantry, acting agent of the Cheyenne and Arapahoe Indians, and to many valuable suggestions furnished by this officer.

Detachments have also been sent out to stop the cutting of timber in the Indian Territory.

In February a band of Kiowas, reported to be committing depredations in Greer County, Texas, was taken back to their reservation by a troop of the Third Cavalry.

In June reported troubles between the settlers in the vicinity of the Kickapoo and Pottawatomie Reservations in Northeast Kansas and the Indians of these tribes with reference to the grazing of cattle on Indian lands were settled by dispatching a detachment of cavalry from Fort Riley, the commander of which acted in co-operation with the agent. The settlers agreed to pay a stipulated price per head for use of Indian land for grazing purposes.

Pursuant to instructions from headquarters Division of the Missouri, Troop D, Fifth Cavalry, was detached to Southwest Colorado in June last, and is now encamped at Morgan's Mill at Lost Cañon Creek, Colorado, there to protect settlers from Indian depredations, co-operating with troops sent to Southeast Utah from the Department of the Platte. There have been no depredations in that vicinity by Indians, and no apparent dissatisfaction on their part or tendency to commit depredations. I have recently visited the camp at Lost Cañon; during my stay there learned that the Indians had been quiet and peaceful during the last year.

In the district of New Mexico up to its transfer to the Department of Arizona, troops were continually engaged in field duties, pursuing hostile Apaches in Southern New Mexico and keeping under restraint the Ute Indians in Northern New Mexico and Colorado.

CHANGES IN DEPARTMENT AND TRANSFERS OF TROOPS.

The District of New Mexico, comprising eight garrisoned posts, viz: Fort Bliss, Texas, Fort Lewis, Colorado, and Forts Bayard, Marcy, Selden, Stanton, Union, and Wingate, New Mexico, was transferred from this department to the Department of Arizona, temporarily, per General Order No. 105, November 30, 1885, and permanently, per General Order No. 25, May 5, 1886, from Headquarters of the Army.

Two companies of infantry, H, First, and A, Fourth, were relieved from duty at the United States Infantry and Cavalry School at Fort Leavenworth, Kansas, and transferred to Forts Halleck, Nevada, and Spokane, Washington Territory, in the Departments of California and the Columbia respectively. They were replaced by two companies from the Department of the Platte—H and I, Sixth Infantry. The headquarters of the Sixth Infantry were also transferred to this department from the Department of the Platte, and stationed at Fort Leavenworth, Kansas, relieving the headquarters of the Eighteenth Infantry, which were transferred to Fort Hays, Kansas.

Company G, Eleventh Infantry, at Fort Leavenworth, is now by Special Order No. 116, current series, Division of the Missouri, under orders to proceed to the Department of Dakota upon the arrival of Company K, Thirteenth Infantry, from the District of New Mexico.

REMARKS AND RECOMMENDATIONS.

The troops in this department are in an excellent state of discipline. No officers have been brought to trial before a military tribunal since the last report. There has been a decrease in the proportion of desertions to the average strength of the department. The last report shows a proportion of $9\frac{1}{2}$ per cent.; this year it is $6\frac{1}{4}$ per cent. The general order from the Headquarters of the Army authorizing courts-martial to take notice of previous trials and convictions in determining the severity of sentence, has already had a good effect in ridding the service of worthless characters after trial by court-martial.

I believe a more simple method of trial for minor offenses should be adopted.

The effectiveness of stable guards would be much increased by their being required to be mounted with the post guard. Members of stable-guards better appreciate the importance of their duties when this is done than when they are simply placed on duty in the stables by their troop commander.

The instruction of officers in tactics and practical military work generally should be enforced at every post. It is believed that sufficient attention has not always been paid to this subject in the past.

I also think that each organization should be required to make a march of at least 200 miles with light equipment of camp equipage, and that they be required to remain on such field duty for at least one month in each year.

In order to maintain post schools at the proper standard, I believe that competent school-teachers should be enlisted for that duty, and that they should receive pay sufficient to induce the enlistment of men with the proper qualifications.

There are now 130 Indians, principally Cheyennes, enlisted as scouts, and stationed at various points in the Indian Territory. The enlistment of these Indians has had the effect of keeping them employed and

quiet; they render good and effective service. It is recommended that these enlistments be continued.

I believe that the practice of leasing lands in the Indian Territory by white men should be discontinued.

I recommend that Fort Lewis be transferred to this department; in the interests of economy, all supplies not procured in the vicinity should be sent from this department.

Attention is respectfully invited to the attached synopsis of the accompanying reports of the chiefs of the several staff departments at these headquarters.

Very respectfully, your obedient servant,

J. H. POTTER,

Brigadier-General, Commanding.

The ASSISTANT ADJUTANT-GENERAL,

DIVISION OF THE MISSOURI,

Chicago, Ill.

REPORT OF MAJOR-GENERAL HOWARD.

HEADQUARTERS DIVISION OF THE PACIFIC,
Presidio of San Francisco, Cal., September 17, 1886.

GENERAL: I have the honor to submit the following report upon military operations and the condition of the Division of the Pacific, for the information of the Lieutenant-General, and to make some suggestions for his consideration.

Arriving in this division in April last, and assuming command of it and the Department of California, I have had but little time to familiarize myself with the details of its condition.

MOVEMENT OF TROOPS.

The transfer of the Eighth Infantry from the Department of California to the Department of Arizona, relieving the First Infantry, transferred to the Department of California; the transfer of the Ninth Infantry from the Department of the Platte to that of Arizona, and the transfer of the Second Infantry from the Department of the Columbia to the Department of the Platte, relieving the Fourth Infantry, ordered to the Department of the Columbia, are the principal movements of troops in this division.

COAST DEFENSE.

I had hardly assumed command of this division before I began to consider the means of defense against a possible invasion of the Pacific coast.

As the Board of Engineers has frequently reported, the entire coast is now unprotected by any system of "permanent works" worthy the name. San Francisco is the largest city on this coast, and is, in every way considered, far the most important. In fact, viewing the distance of San Francisco from Washington, the capital, it is in my judgment the first city of the United States that ought to be placed in a position of reasonable defense.

Had we been so unfortunate as to have gone to extremities with Chili, Mexico, or with Canada, involving Great Britain, notice how next to impossible it would have been to defend San Francisco against the approach and attack of iron-clad vessels.

The prevalent statement that under all circumstances numbers of brave, true men are a sufficient defense to any country is a palpable mistake. It is certainly inviting attack to present a rich and beautiful city to the greed of nations that assuredly are not yet wholly governed by benevolent considerations. The forts are not in order; they are not manned with guns of the proper caliber; and, what is worse, there are no guns of the right size and power in the whole country to bring here.

There should be a "plant" on this coast, and speedy preparations for making suitable guns; and other means of defense ought not to be delayed. Time is all important. True, the cost will be great, but the money will mainly go to the working classes of our people.

California is too fine a State to be left completely to the mercy of other nations, with whom any day we may have a serious conflict. Once lost, the regaining would involve millions more than the cost of a simple and proper system of defensive works.

Now shells could be easily thrown from the neighborhood of the Cliff House, outside the harbor, to every part of San Francisco, and without exceeding modern ranges, could be dropped even into Oakland. I therefore recommend that money be appropriated, so that a good torpedo defense may be planted; that Alcatraz Island be turned over to the Engineers, and the proposed fortifications completed thereon; that a fleet of torpedo-boats be constructed, and that the 8-inch converted and 15-inch guns now around the harbor be properly mounted; that two floating batteries be built and armored, as suggested by the Board of Fortifications appointed under act of Congress of March 3, 1885. This will tend to place this harbor, the western entrance to this country, in a defensible condition and hinder an enemy's entrance with a hostile fleet.

It would, however, as before remarked, do nothing towards preserving San Francisco from the fire of modern ships of war anchored outside the "Heads," and Oakland might be involved. To properly protect these cities, new forts, with heavy guns, would have to be built on the coast, supplemented by heavy cruisers, floating batteries, and torpedo-boats. Other cities on this coast are entitled to consideration, but they can better wait than San Francisco to be made secure.

CONCENTRATION OF TROOPS.

In pursuance of the approved policy of concentration, I would recommend that the garrison at Fort Winfield Scott, California, be discontinued and that the two batteries now there be stationed at the Presidio. This change has so commended itself to my judgment, and its early accomplishment seemed so necessary, that I have already made it the subject of a special report.

There seems no good reason why Fort Halleck, Nevada, should not now also be abandoned. It is 12 miles from the railroad, and possesses no paramount importance as a strategic point. There are few Indians in the vicinity; the nearest reservation (Western Shoshone) being over 100 miles north, in Idaho. There are but few settlers in that region, the whole country being covered with dense sage-brush, and these need no protection. These settlers are of course interested to some degree in keeping up the post, in order to have a market near at hand for what grain and other supplies they can raise. It is, considering its size, the most expensive post in the department. I earnestly recommend its early abandonment.

In this connection, I would invite attention to the special report of an inspection which I caused to be made of Fort Halleck, by Lieutenant Colonel McKeever.

In the Department of Arizona, now that the Indian troubles are virtually settled, there will no doubt be opportunity, to some extent, for concentration.

In the Department of the Columbia, Fort Klamath should be abandoned.

Other changes to this end might be suggested, but they are at present impracticable, owing to the failure of appropriations to make the necessary enlargement of posts for the accomodation of additional troops.

DISCIPLINE.

The conduct of the commissioned officers of the division has been good. Only three court-martial cases occurred during the past year (less than one-half of one per cent. of the number of officers in the division), *i. e.*, cases where the accused have been found guilty of breaches of discipline which called for condemnation in general orders.

PHYSICAL CONDITION.

The health of both officers and enlisted men has been excellent during the year. But three deaths of the latter have happened during this time in the Department of California. In some localities in the Department of Arizona, the health of the men has not been up to the standard, owing to the poor quality or water supplied. This evil will, as far as possible, be speedily remedied.

MORAL CONDITION.

It is believed that the class of men now enlisted is better than it has been for years. Whether this is due to more discrimination on the part of the recruiting officers or to a higher class of men available is not known.

The records show that while desertions are still numerous, aggravated crimes, such as would be brought before a general court-martial, are less than in former years.

Trials for "disorders and neglects" are mainly confined to petty offenses.

There is no greater safeguard against breaches of discipline than to create for the men, when not occupied with their duties, means of harmless amusement and recreation. The target practice, as it exists to-day, serves a double purpose of drill and recreation, and calls forth between companies and individuals a spirit of healthy rivalry. A well-equipped gymnasium, with an efficient instructor in charge, who should train the men in physical development, would be a sensible addition to each post. "Assaults at arms" and athletic exhibitions might be especially encouraged at stations adjacent to large cities, and thus evidence to a class desirable for recruits some of the attractions and advantages of the military service.

Post libraries and reading-rooms are well patronized and should receive every assistance. But at least 2 per cent. of the enlisted men can receive no benefit from them, being unable to read or write.

Attendance at the post schools should be made imperative, and not voluntary as now.

It has occurred to me that a distinction in the matter of pay might be made, as in the Signal, Ordnance, and Engineer Corps, with good results, between the sober, intelligent man who understands and performs his duty, and the worthless "ne'er do well," who does nothing satisfactorily and passes most of his time in guard-house or hospital. I sug-

gest that the former be rated as "first-class private," with higher pay, and of course be the man eligible for promotion; the latter as "second-class private," with lowest scale of pay. It might be well to refuse the benefit of additional pay authorized by act of May 15, 1872 (sec. 1281, Rev. Stat.), to the "second-class private."

The favorable influence which was anticipated by the regulation allowing the transportation, at public expense, of professional books belonging to officers, has already been felt, and is particularly noticeable in the increased interest taken by them in the literature of their profession. I would recommend broadening of the regulation, to include other scientific and literary works under reasonable limitations.

DESERTIONS.

The number of desertions occurring in the division during the year is less than for many years past. Under the present system of general recruiting, the five years' term of enlistment, and with the present ration too small and illy cooked, it is doubtful if the average of desertions from the Army will ever be much reduced. There are occasionally cases where desertion is due to mismanagement in the affairs of the company or post, to harshness or injustice, but these are few. The causes of desertion are, however, sometimes found in the men themselves. In view of the facts taken from reports regarding the foreign element in the ranks, and in our military prisons, it would seem that greater care should be taken in enlisting recruits of foreign birth. A reduction of the term of enlistment, or a system granting discharges under proper restrictions, would quickly lessen the number of desertions. The same would be true if there were a system of promotions to remunerative positions in other departments of the Government, thus affording greater inducements to a class of young men who now seldom enlist.

RECRUITING.

The recruits for the Department of California are enlisted almost wholly at the department and regimental recruiting offices. In view of this fact, I would recommend that in fairness the detail of enlisted men from this department on general recruiting service in the East be discontinued. The enlistment in this department may, in a measure, be taken as an example of "localizing," so often suggested, and in this case, at least, the results justify the belief, that if generally adopted in recruiting our Army, the results would be beneficial.

The people of a section would then have an interest in "their" regiments, and the relations of the Army and the people partake of a more intimate nature than now. With our small Army in constant motion, the objection that can be urged against such a departure from our present system would not have much weight.

INSTRUCTION.

The field instruction of officers at some of the posts in the Departments of California and Columbia has not been supplemented by theoretical teaching, no officers' schools having been held.

In Arizona, excellent practical instruction for the officers and men has been furnished by an active Indian campaign.

Target practice has received much attention, with corresponding good results. It still holds its interest for all concerned, and demands every officer and soldier. Could attendance at company and battalion drills be made as mandatory, the same excellence now lacking would

be observed in tactical movements. There is no cogent reason why every enlisted man, except one cook with each company, should not be required to give one hour out of the twenty-four to his profession. More attention could then be given to parts of a soldier's duties now slighted or totally neglected; for example, in the cavalry, to mounted firing and equitation; and, if an increased allowance of ammunition could be authorized for the artillery, to practice with the ordnance properly belonging to that arm.

As it does not seem to be understood that the enforced instruction of enlisted men in the common English branches was contemplated, and unless remedied as previously suggested, I would recommend as one of the requirements of a recruit before enlistment, that he should be able to read and write English.

I would recommend that more attention be given to the estimating of distances, especially by the officers. For them at least, proficiency in this is as important as good marksmanship. By means of a similar system of competition and marking it would be made as interesting and would soon command the same attention as rifle practice.

COURTS-MARTIAL.

With a view to economy and the equitable dispensing of justice, the enforcing of discipline by courts-martial should be simplified. A class of minor offences, clearly defined, could certainly be entrusted to company commanders; those of a more serious nature, including the rest of those usually brought before a garrison court-martial, and even some cases now referred to the general courts, should be turned over to the field-officers' court.

In view of the marked disparity in the length of sentences by general courts-martial in this division, it is recommended that the punishment for certain crimes be fixed by the War Department according to an equitable penal scale. The evident injustice where convicts in the same prison serve sentences which differ by three years for the same crime, committed under precisely the same circumstances, should be remedied by an authority which extends to the whole Army.

DIVISION AND DEPARTMENT HEADQUARTERS.

The division and department headquarter offices are now in barrack buildings at the Presidio, that are in fact inadequate to the purpose. These buildings are really needed for the garrison as quarters, as are also the officers' quarters, now occupied by part of the division and department staff. I think it would be better to erect a proper headquarter building, like that at Fort Snelling, Minnesota, on some ground separate from the Presidio garrison, probably on some obtainable lots in the city of San Francisco, near the business centers. This for the reason of speedier communication, supply, and transportation. It may not be the most economical to change headquarters as suggested, but it will be vastly better for the unity of command, the discipline of the garrison, and the comfort especially of the line officers, to effect a separation of them from the general staff. As now there is necessarily a divided responsibility where no actual division can be easily arranged, and certainly where none is desirable.

In case the headquarters remain on a military reservation, I recommend the erection of a proper building for their accommodation at some convenient point apart from the garrison. Or if removal to San Francisco proper should be deemed best, I suggest that the preliminary steps be taken necessary to such a removal. Plans and estimates can be for-

warded speedily after the wishes of the Lieutenant-General and the War Department shall be known.

QUARTERMASTER'S DEPARTMENT.

Attention is called to the inferior quality of the boots and shoes furnished the troops.

In this connection I ask consideration of the fact that the change in the facings of the infantry officer's uniform, to white, is universally condemned. Nine out of the ten officers would gladly incur the expense of a new set of trimmings could they return to the dark blue, or any other color that will not after the first week's wear look soiled and unpresentable.

The purchase of cavalry horses for this division is a matter that deserves consideration. Good horses for cavalry service can be bought of breeders for from \$80 to \$100, but unbroken. The last horses offered by contractors cost \$140, and were poorly broken.

With the approval of the War Department, I would locate one or two troops of cavalry at the Presidio, use their horses if necessary to supply those immediately needed in other troops, then have horses purchased by the chief quartermaster from the horse breeders and bring them here, and have them thoroughly broken by the cavalrymen.

The Presidio Reservation is large enough to furnish grazing for at least 200 horses the year round. This would insure a supply of horses well broken by cavalrymen for the cavalry service of this division.

It is evident that there should be a change in the method of purchasing small items by contract, articles of trifling cost. It will be in the interest of economy to trust more to the honor of a purchasing officer in such cases.

The charge to the enlisted men for altering their clothing creates dissatisfaction among them. It is not right to make the charge.

SUBSISTENCE DEPARTMENT.

The subsistence stores purchased on this coast give comparative satisfaction. Especial complaint is made of certain stores sent from the East, principally of the canned goods.

There can be but little doubt that the "ration" is too small. Its composition should be improved. Oatmeal or cracked wheat would be a welcome addition to the soldier's bill of fare, especially for the morning meal. The meat ration, free of bone, is barely sufficient for dinner, and yet is frequently subdivided with a view to give increase to the morning and evening meals of "bread and coffee." The ration of fresh meat ought to be increased to $1\frac{1}{2}$ pounds. An improvement in this important item, in quantity and in preparation, will result in a saving to the Government by eliminating a fruitful cause of desertion. I recommend that the mess-room furniture be supplied by the Subsistence Department, and not be a tax on the soldier's ration, as it now is.

Company cooks.—A ration, however sufficient, prepared as the average company cook does it, is not the best. The usual and the only fair way is to have the men take turns at this important work. Frequently the coffee is weak or cold, or both. The meat and vegetables are often burned or overseasoned, and generally speaking there is a lack of variety. A change in the manner of preparation of articles cooked will be attained by having an experienced cook. A good cook is worthy of his hire, and on this coast one cannot be enlisted, and few are made so during their brief terms of service in the kitchen. I would recommend this subject for especial attention.

Post traders.—The variety and excellence of the stores kept for sale by the Subsistence Department, and those which could readily be added, renders less necessary the presence of a post trader's establishment at a post, with his privilege of selling "light wines" and beer. If permits to sell these drinks to the men were taken away from these traders they could seldom exist.

A soldier given to drink can and does get just as drunk on wine and beer as on stronger drinks, and I think it is not exaggeration to say that four-fifths of our court-martial cases, with their attendant expense to the Government, have their origin at the post trader's bar. True, often drunkards are regulated and restrained through reliable post traders, but the mischief lies in encouraging others, especially young recruits, to spend their money for drink. Facts do not support the statement that sobriety is promoted by supplying wine and beer to the enlisted men.

INDIANS.

During my inspections of the forts in the Department of California I visited Fort Gaston and the Indians of the Hoopa Valley Reservation. The agent was an Army officer of high character, Captain Andrews, Eighth Infantry. He has since been relieved by Captain Dougherty, First Infantry, who has had experience with Indians, and is worthy of confidence. The latter gives me some insight into the previous circumstances of the inhabitants of Hoopa Valley, and abundance of facts relating to them and to the tribes on and off the Klamath (California) Reservation. It is, in substance, that a system of peonage had crept into the management of affairs at the agency, which was encouraged more or less by the Indian Department. For example, contractors for Government supplies hired the Indian farmers for what amounted to a mere subsistence. These contractors bidding for supplies for Fort Gaston invariably added to the cost of the articles the cost of transportation over the mountains 2 cents per pound, more or less. (Contract 1886, Arcata to Fort Gaston, \$1.90 in summer and \$2.85 in winter months per 100 pounds).

After receiving the contract, the contractors, being usually outside the valley, have employed the Indians to cut hay and wood upon the reservation at 30 cents per day. They have usually bought the wheat and barley of the Indians at the smallest figure, and, of course, supplied the Government at the contract price. Now, if the Quartermaster's Department, in such cases here and elsewhere where similar conditions exist, could be authorized, as has been done in many places, to purchase directly from the Indians, paying them the current market price, a great saving would be effected to the Government, and the Indians would be encouraged to industry and thrift, because they would get a reasonable compensation for their labor. The Hoopa Indians have one day-school, the average attendance at which is 31 out of 86 children of school age. Efforts are being made to place the affairs of this agency in the hands of a local civil official. Under the guise of philanthropy, interested parties are making every effort to install one of their number as agent. The removal of the present military control would in my judgment be very unwise. The Indians themselves are opposed to any such change, recognizing that if left without military protection their valley would soon be overrun, and they themselves forced to the wall by unscrupulous intruders.

Klamath Indians.—Already encroachment on the boundaries of the Klamath River Reservation has begun, owing to their not being definitely fixed by recent survey. On this reservation there are no schools.

The Pi-Utes near Fort McDermit remain quiet and peaceable, and a few of their children are at school.

The Nez Percés, including the returned "non treaties" and the Indians of the Columbia River region, are slowly improving their condition. The Nez Percés proper I consider the most intelligent and promising of our Indian tribes. General Gibbon recommends "that the sum of \$1,895.55, expended by the Subsistence Department in feeding the destitute Nez Percé Indians in the vicinity of Fort Spokane last fall, be recovered from the Indian Department." In this I concur.

Apache campaign.—On the 17th of May, 1885, a party of about 50 of the Chiricahua prisoners, headed by Geronimo, Natches, and other chiefs, escaped from the White Mountain Reserve in Arizona, and entered upon a career of murder and robbery unparalleled in the history of Indian raids. Since then, and up to the time of my assuming command of this division, they had been pursued by troops with varying success.

After the assassination of Captain Crawford, on January 11, by the Mexicans, the hostiles asked for a "talk," and finally had a conference, on March 25, 26, and 27, with General Crook, in the Cañon de los Embudos, 25 miles south of San Bernardino, Mexico, on which latter date it was arranged that they should be conducted by Lieutenant Maus, with his battalion of scouts, to Fort Bowie, Arizona. The march commenced on the morning of March 28, and proceeded until the night of the 29th, when, becoming excited with fears of possible punishment, Geronimo and Natches with 20 men, 14 women, and 2 boys stampeded to the hills. Lieutenant Maus immediately pursued, but without success. The remainder of the hostiles, including Chiefs Chihuahua and Josanié, some 77 in all, arrived at Fort Bowie on April 2. On April 3, before the arrival of General Miles in Arizona, the commanding general of that department was instructed by the Secretary of War to send all these Chiricahua hostiles just captured to Fort Marion, Florida. On the 7th of April they were forwarded under escort.

Simultaneously with my taking command of the division, Brigadier General Crook was relieved by Brigadier-General Miles, who at once set out to complete the task commenced by his predecessor. Geronimo and his band were committing depredations, now in the United States and now in Mexico, and, being separated into small parties, easily eluded the troops, and carried on their work of murder and outrage.

Early in May General Miles organized the hostile field of operations into districts, each with its command of troops, with specific instructions to guard the water holes, to cover the entire ground by scouting parties, and give the hostiles no rest. An effective command under Captain Lawton, Fourth Cavalry, was organized for a long pursuit.

On May 3 Captain Lebo, Tenth Cavalry, had a fight with Geronimo's band 12 miles southwest of Santa Cruz, in Mexico, with a loss of one soldier killed and one wounded. After this fight the Indians retreated southward, followed by three troops of cavalry.

On May 12 a serious fight of Mexican troops with the hostiles, near Planchos, Mexico, resulted in a partial defeat of the Mexicans.

On May 15 Captain Hatfield's command engaged Geronimo's band in the Corrona Mountains, suffering a loss of 2 killed and 3 wounded, and the loss of several horses and mules; the Indians losing several killed.

On May 16 Lieutenant Brown, Fourth Cavalry, struck the hostiles near Buena Vista, Mexico, capturing several horses, rifles, and a quantity of ammunition.

The usual series of outrages, with fatiguing chase by troops, continued until June 21, when the Mexicans engaged the hostiles about 40 miles

southeast of Magdalena, Mexico, and after a stubborn fight repulsed them and recaptured a young Mexican girl.

Captain Lawton's command with energy and persistence kept on the trail and eventually located them in the mountains near the place of the before-mentioned fight with the Mexicans. He finally surprised the camp of the hostiles 300 miles south of the Mexican boundary, capturing 19 horses and all their property and supplies. Thus for the fifth time in three months had the Indians been overtaken by the troops, and their stock been either wholly or partially captured. While these successes were not decisive, they were weakening the Indians and encouraging the troops.

About the middle of August Geronimo and his band were so reduced and harassed by the tireless pursuit of the soldiers that they made offer of surrender to the Mexicans, but without coming to terms. Their locality thus being definitely known, disposition of the troops was rapidly made to act in conjunction with the Mexicans to intercept Geronimo and force his surrender.

On August 25 Geronimo, when near Fronteras, Mexico, recognizing that he was pretty well surrounded, and being out of ammunition and food, made overtures of capitulation, through Lieutenant Gatewood, Sixth Cavalry, to Captain Lawton. He desired certain terms, but was informed that a surrender as prisoner of war was all that would be accepted. The Indians then proceeded to the vicinity of Captain Lawton's command near Skeleton Cañon, and sent word that they wished to see General Miles.

On September 3 General Miles arrived at Lawton's camp, and on September 4, Natchez, the son of Cochise and the hereditary chief of the Apaches, with Geronimo, surrendered all the hostiles, with the understanding, it seems, that they should be sent out of Arizona. I am not informed of the exact nature of this surrender at first deemed unconditional. *En route* to Fort Bowie 3 men and 3 women escaped, and are still at large.

In the early part of July, 1886, the subject was first broached of sending all the "Warm Spring" and "Chiricahua" Indians, then on the reservation at Fort Apache, some 450 or 500 in number, to some point outside of Arizona. This project seemed to meet with approval, and, as a preliminary step, on July 8 a delegation of these Indians under charge of an officer, was authorized to be sent to Washington in order to obtain their consent to a removal, and have them select a locality consonant with their wishes. The delegation went, with what success is not known; but during their return, about the middle of August, they were stopped at Fort Leavenworth, Kansas, and detained there.

Under date of August 25 the Lieutenant-General of the Army telegraphed to General Miles the decision of the President, that the latter would not entertain the proposition to move the Warm Spring and Chiricahua Indians at Fort Apache, Arizona, to any point west of the Mississippi River, but that the President, the Secretary of the Interior, Secretary of War, and the Lieutenant-General himself, agreed that they must be sent to Fort Marion, Florida. It seems that efforts were made by General Miles to have this decision changed, but without avail; for on August 27 the instructions of August 25 were reaffirmed.

On August 29 General Miles reported that these Indians were held by Colonel Wade under good control, and that they would be moved to Holbrook and thence by rail to Fort Union, New Mexico, and their stock overland to the same point. On the 2d of September he reported by telegraph that the Warm Spring and Chiricahua Indians would be

moved the next day, or the day after. He also recommended that he be allowed to send the Warm Spring band to Fort Riley, Kansas, and the Chiricahuas to Fort Leavenworth. On September 3, by peremptory order of the Acting Secretary of War, General Miles was directed to carry out the previous order of the President, and to have these Indians moved straight to Fort Marion, Florida.

On September 7 the Lieutenant-General telegraphed General Miles that his dispatch reporting "that it was expected to start Geronimo, Natchez, and other prisoners of the hostile band east on the 8th instant" was received, but that no decision had yet been reached as to disposition of Geronimo and his band. They being "prisoners of war, without condition," he was "hereby" directed to hold them in close confinement at Fort Bowie, Arizona, until the President's order should be communicated to him; but that this must not delay the removal of the Warm Spring and Chiricahuas by Colonel Wade. The President's decision was telegraphed General Miles the next day, and was in effect that the surrendered hostiles should be kept as prisoners until they could be tried, or otherwise disposed of, and that those to be sent to Florida should be started at once.

From a telegram sent General Miles, by the Acting Secretary of War, on September 9, in reply to his of the 8th, asking "that Geronimo, Natchez, and the other Apaches who had surrendered, be sent out of Arizona to Fort Bliss or Fort Union, or to Florida," came the first intimation to me that the hostiles had not surrendered "without conditions."

This telegram of General Miles, alluded to above, was sent to the President, who again reaffirmed his previous instructions, "to have them sent immediately to the nearest fort or prison, where they could be securely confined." Under date of September 9, General Miles first reported to me that "there is an erroneous impression regarding the Indian prisoners of war"; that "they surrendered with the understanding that they would be sent out of the country," and that "three men and three women escaped." He informed me in the same telegram that "for several reasons it was unsafe to hold them at Fort Bowie," and that "Captain Lawton had moved them east last night," September 8, and would be in San Antonio to-morrow, and at Fort Marion in four days, and reports that he (himself) goes "to Albuquerque to-night to attend personally to the removal of those from Apache"—i. e., the Chiricahuas and Warm Spring bands, under charge of Colonel Wade.

On September 10, presumably as soon as this action of General Miles was known at Washington, the Acting Secretary of War, issued orders to General Stanley to take charge of Geronimo, Natchez, and other hostiles recently surrendered, and securely confine them at San Antonio, Tex., until further orders, where they now are.

In some of the correspondence carried on by General Miles with those higher in authority than myself I have been left uninformed. Especially with regard to his own communications. The replies to him, being usually sent through my headquarters, give me but partial knowledge.

I think it most probable that this direct reporting arose from a dispatch sent by my predecessor to General Crook, authorizing him to save delay, to telegraph directly important news. Certainly, if this were done, a duplicate should have been forwarded at once to the responsible division commander. So much confusion arises from ignoring the prescribed channels, that I earnestly hope that such action of my subordinate commanders will not hereafter, except in plain emergency, be sanctioned nor encouraged.

Brigadier-General Miles, Capt. H. W. Lawton, Fourth Cavalry, and other officers with their soldiers who have borne a part in the late Indian campaign, deserve special mention and credit for the tireless energy with which it was prosecuted to a successful completion.

The very fewness of numbers of the hostiles in that boundless, rugged, and almost pathless country, rendered the difficulty of pursuit and final capture unusual, and it is hoped that the main causes of disquietude in Arizona and New Mexico are now over.

A proper punishment of the captured hostiles will go far to deter other Apache tribes from following the evil example of the Warm Spring and Chiricahua Apaches.

THE CHINESE.

The Chinese troubles of last spring at Seattle and Tacoma, Washington Territory, in this division, and at Rock Springs, Wyo., emphasize the fact that a serious element of disturbance exists in nearly every city and town on this coast. The well-known feeling of hostility towards the Chinese existing among certain classes of our people is likely at any time to find expression in riots such as these. Then only prompt action on the part of those whose duty it is to maintain the laws can avert the destruction of life and property. The relation between the Chinese population and the "companies," which seem to exert a mysterious control over them, is not known to me; but if, as claimed by large numbers who are hostile to the Chinese, they are held in bondage on our soil by them, and are when leaving China actually slaves, it will not be difficult to remove this evil. Yet until this statement is verified by a thorough and competent investigation and a remedy applied, the need of an ample United States force is apparent.

Brigadier-General Gibbon's report for the Department of the Columbia is full and explicit. All the disturbances referred to occurred prior to my taking command. He reports that "the troops in the department are in a satisfactory condition," and commends the effect of their concentration in large garrisons. His acting inspector-general exhibits too many irregularities on the part of post commanders in their administration to pass unnoticed.

Concerning them General Gibbon remarks "that the various irregularities and defects referred to will be corrected in time by calling the attention of the post commanders to the matters as they arise."

The annual report of Brigadier-General Miles has not yet arrived. It will be forwarded on receipt with request that it form part of this report.

Besides other communications, those of the inspectors-general of the departments, and especially that of Lieutenant-Colonel Hughes, have afforded me valuable suggestions, some of which I have embodied in my report.

Special attention is called to the detailed reports of the department and the division staff attached.

I am, sir, very respectfully, your obedient servant,

O. O. HOWARD,

Major-General, U. S. Army.

ADJUTANT-GENERAL, U. S. ARMY,

Washington, D. C.

REPORT OF BRIGADIER-GENERAL CROOK.

HEADQUARTERS DEPARTMENT OF ARIZONA,
In the Field, Fort Bowie, Ariz., April 10, 1886.

SIR: I have the honor to submit the following report of the operations of the troops under my command in the pursuit of the hostile Chiricahuas.

My first information of impending troubles was a telegram received on the afternoon of May 17, 1885, and before a reply could be sent the wires between Fort Apache and San Carlos were cut. The next afternoon I was informed that Geronimo, Nana, Mangus, Natchez, and Chihuahua, with a considerable party, had left their camp just after dark on the preceding evening. Within a few days the exact number of renegades was fixed at thirty-four men, eight well-grown boys, and ninety-two women and children. I learned that on May 15 Lieut. Britton Davis, Third Cavalry, sent a telegraphic dispatch (copy attached, marked A),* which I did not see until months afterwards. Had this telegram reached me I feel morally certain that the troubles would have been settled without an outbreak. Troubles of minor importance were constantly occurring on the reservation, which were quieted down by the officers in charge by reporting them to me and receiving my instructions. There probably would not have been as much danger or difficulty in managing the matters reported in Lieutenant Davis's telegram as there was in quelling the disturbances started by Ka-e-te-na in March and June, 1884, in which Bonito was implicated, or those in July, 1885. I have not on hand copies of papers relating to the management of these difficulties, but in each instance methods were employed suitable to the special emergency. The trouble arose from a tiswin drunk, and in order to shield the guilty parties, all the prominent chiefs drank of this liquor, and in a body went to Lieutenant Davis and informed him of this fact, thinking that in this way all would escape punishment. Lieutenant Davis told them that in a matter of such importance he could not take action himself, but that he should report the whole occurrence to me for my directions. Lieutenant Davis wrote the telegram in the presence of the Indians, and told them what he had written, and said that he should act in accordance with my personal instructions, and that he would notify them what my orders were when received. A messenger was immediately sent with this dispatch to Fort Apache, but no reply was received. The Indians waited until dark, and again assembled the next day, but receiving no reply became alarmed, and doubtless concluded that I was making preparations to seize the whole of them and punish them as I had Ka-e-te-na. This idea, I afterwards learned, had been put in their heads by ill-disposed persons on the reservation. A matter of this kind, while it must be managed with exceeding caution, must be settled promptly, without giving time for their suspicious imaginations to work on their fears. Delay is a fatal error.

For further details attention is invited to the report of Lieutenant Davis, which accompanies this paper.*

Within an hour after the renegades left their camp on Turkey Creek, two troops of the Fourth Cavalry, under command of Capt. Allen Smith,

* Omitted.

Fourth Cavalry, and a party of White Mountain and Chiricahua scouts, under Lieutenants Gatewood and Davis, left Fort Apache in pursuit, but such was the rapidity of their flight that it was impossible to overtake them. It subsequently appeared that they traveled nearly one hundred and twenty miles before stopping for rest or food. (Captain Smith's report is attached, marked B.)*

As soon as the departure of the Indians was known, troops were immediately put in motion to endeavor to overtake or intercept them. Captain Pierce, with a party of scouts from San Carlos, moved towards Ash Peak. The commanding officer at Fort Thomas without waiting for orders sent two companies of cavalry towards Clifton. The commanding officer at Fort Grant was ordered to send all his available force of five troops of cavalry towards the Gila, with orders to cut their trail if possible, and to pursue vigorously, regardless of departmental or national lines. The commanding officer of Fort Bowie was ordered to ambush his cavalry at proper points in the Stein's Peak Range, which had been a favorite trail in former years. The commanding officer at Fort Huachuca was instructed to send three troops to Guadalupe Cañon and to scout the whole country in that vicinity. Information was sent to the commanding officer district of New Mexico of the departure of the Indians and the movements of my troops, and finally every effort was made to warn citizens at all points within reach of danger.

On the 28th of May, my information indicating that the Indians had gone into the Black Range, in New Mexico, I left my headquarters and proceeded to Fort Bayard, where I could more intelligently direct the movement of troops from my department. The whole country north, east, and west of Bayard was filled with troops. No less than twenty troops of cavalry and more than one hundred Indian scouts were moved in every direction either to intercept or follow the trails of the hostiles. But with the exception of the capture of a few animals by the Indian scouts under Chatto, and a slight skirmish with their rear guard by the troops from Apache under Captain Smith on May 22, in which three of his command were wounded, the Indians were not even caught sight of by the troops, and finally crossed into Mexico about June 10.

In the twenty-three days from the outbreak until the Indians crossed into Mexico, every possible effort was made by the troops, which were pushed to the limit of endurance of men and animals, but without result other than to drive the Indians out of the Black Range and Mogollons, and also to save the lives, probably, of many ranchmen and prospectors. It must be remembered that the two years of peace had enormously increased the business interests of Arizona and the contiguous portions of New Mexico. Cattle and horse ranches had been established wherever a mountain stream afforded the necessary water. Thus the Indians found food and transportation in every valley, whereas the troops pursuing were limited to the horses they were riding and to the rations carried on their pack-trains. The vigor of the pursuit may be understood from the fact that probably more than 150 horses and mules were found on the different trails, which had been worn out and killed or abandoned by the Indians in their flight.

As soon as it became evident that the Indians were moving south, I proceeded to Deming on June 5, and began preparations to follow them into Mexico.

Captain Crawford, Third Cavalry, who had reported to me, was ordered with the battalion of scouts which had been operating in the

* Omitted.

country about the old Warm Spring Reservation, to Separ by rail, and thence to move with a troop of cavalry to the south end of the Animas Valley, with the hope that the Indians might cross into Mexico through the Gaudalupe Mountains. The result proved that the main body of the hostiles crossed the line to the west of the Mule Mountains, though a small party surprised a camp of the Fourth Cavalry in Guadalupe Cañon, guarded by a party of 7 enlisted men, killing 4 of them, and another small party crossed the line near Lake Polomas. Lieutenant Davis, who with 60 White Mountain and Chiricahua scouts had been following the trail of the Indians as rapidly as possible, was ordered to report to Captain Crawford, and on the 11th of June the combined force, consisting of 92 scouts and Troop A, Sixth Cavalry, followed the hostiles into the Sierra Madre. On the 9th of June a telegram (copy attached, marked C*) was received from Lieutenant-General Sheridan, informing me that I was authorized to enlist 200 additional scouts, and the Cheyenne pack trains had been ordered to report to me, and directing that I establish my headquarters at a point either on or near the Southern Pacific Railroad. I accordingly proceeded to Fort Bowie. Directions were immediately issued for the enlistment of the new scouts, 100 at San Carlos, and the remainder at Fort Apache. As soon as the 100 at Apache were enlisted, Lieutenant Gatewood was ordered in command to thoroughly scout the Mogollons and Black Range in order to definitely determine whether any of the Indians were remaining in that region, as was persistently reported. This movement delayed his arrival at Bowie about twenty days, and though it was found, as I supposed, that there were no hostiles in New Mexico, I did not think it advisable to organize a second expedition for service in Mexico until this fact was definitely established.

As soon as necessary preparations could be completed, Capt. Wirt Davis, Fourth Cavalry, with a command consisting of his own troop of cavalry and 100 Indian scouts with pack trains carrying sixty days' rations, was ordered into Mexico. My plan of operations was as follows: That the commands of Captains Davis and Crawford should thoroughly scout the Sierra Madre and the adjoining mountain ranges and endeavor to surprise the hostile camps in Mexico, and at the same time to so station troops along the border as to prevent if possible the return of the renegades to the United States when they were driven out of Mexico by the commands operating in the mountains. With this in view, I placed a troop of cavalry at every water-hole along the border, from the Patagonia Mountains to the Rio Grande. With each troop I stationed a detachment of Indian scouts, with sufficient pack-mules to carry at least ten days' rations for the command. Orders were given to conceal the troops, and to keep the country between the different camps constantly patrolled. I also established a second line nearer the railroad, as reserves to the first line. In order to insure prompt supplies to the commands operating in Mexico, I established a depot at Lang's Ranch, at the south end of the Animas Valley, near the boundary. In New Mexico reserve camps were also established at such points as seemed to offer the best facilities for rapid movement and successful pursuit in the event that the renegades should return to the United States. Four troops of the Eighth Cavalry from Texas having reported to General Bradley, were stationed north of the railroad at points which were considered as being most available for pursuit of the Indians and most likely to afford protection to life and property. On the 23d of June, Captain Craw-

* Omitted.

ford's scouts, under Chatto, struck Chihuahua's band in the Bavispe Mountains, northeast of Oputo, but owing to the position occupied by the hostiles their camp could not be surrounded, and in the fight which ensued the hostiles escaped. Fifteen women and children, a number of horses, and a considerable amount of plunder were captured. (A report of this affair is attached, marked D.*)

Captain Davis, Fourth Cavalry, crossed into Mexico, July 13, and after much severe fatigue succeeded in locating the camp of a band of hostiles under Geronimo in the Sierra Madre, a little northeast of Nacori. The camp was attacked by a picked detail of 78 scouts under Lieutenant Day, Ninth Cavalry, and though the surprise was complete, it is now believed that the only Indians killed were 1 squaw and 2 boys. Everything in the camp was captured and 15 women and children. A copy of Captain Davis's report of this affair was forwarded at the time. Captains Davis and Crawford continued scouting in the mountains, and their commands suffered and endured uncomplainingly almost incredible fatigues. But the Indians were so constantly on the alert that no further engagement was had until, on September, 22, Captain Davis again struck a band of about 20 hostiles in the Terres Mountains and in the fight that ensued 1 of his scouts was killed. The Indians, having been driven out of Mexico by the scouts, crossed into the United States through Guadalupe Cañon, within a few miles of a camp of two troops of cavalry, about daylight on the morning of September 28. They were closely followed by both Captains Davis and Crawford. It being evident that the hostiles intended to raid the White Mountain Reservation or go into the Mogollons or Black Range in New Mexico, dispositions were made to prevent this; cavalry were directed from different points by converging routes towards the Gila; troops were established in positions to prevent the Indians crossing the San Simon Valley into the Stein's Peak Range; others were placed along the railroad where they would be available for instant transportation by rail to threatened points. The scouts followed the hostiles, and several troops of cavalry were moved to points where it was thought possible that they might ambush them. The renegades took the roughest possible trails over the Chiricahuas, twice endeavored to cross the San Simon Valley, but each time were frightened back into the Chiricahuas either by seeing the dust of moving columns or discovering their trails across the valley. They then crossed the Sulphur Springs Valley, by night, into the Dragoons, whither they were followed by Crawford's scouts. Through this range back into the valley, south towards the Mule Mountains, when their trail suddenly turned sharp to the east and went back into the Chiricahuas, Crawford's scouts following persistently. The stock of the hostiles by this time was worn out, and though they had gathered all possible along their route they were finally absolutely dismounted, and troops were in such position that it seemed probable that the entire band would be captured or killed. But just at this juncture they succeeded in remounting themselves with the best stock in the country, and, finding that it would be impossible to get north of the railroad, they returned to Mexico. Captain Viele, Tenth Cavalry, followed them with two troops as far as Ascension, Chihuahua, from which point, further pursuit being useless, he returned with his jaded command to his camp in Cave Cañon. The remounting of the hostiles was, in this instance, particularly exasperating. The cattlemen of the San Simon had gathered in White Tail Cañon, on the east side of the

* Omitted.

Chiricahuas, for the beginning of their fall round up. In spite of warning, which they received the evening before, that Indians on foot had been seen in the vicinity, they lariatied their cow ponies, the best stock in the country, around a ranch in which they all slept. In the morning all their stock, with the exception of two or three, were gone and the Indians had secured about 30 of the best horses in Arizona. This is not an isolated instance. Several times before and since parties of Indians have been dismounted by persistent pursuit and escaped in the same way by securing remounts, and this too in spite of constant warning and importunities to ranchmen to secure their stock. The Indians acted as if they could take stock with perfect impunity. At one time they took a quantity of stock from a corral belonging to the Sulphur Springs Cattle Company, under circumstances that make it evident that several men who were in the ranch knew what was going on, and although there were only three Indians in the party, no attempt was made to prevent the stock being taken. At another time, early in June, a party of Indians, numbering perhaps a dozen men and 40 or 50 women and children, drove up and shot down several beeves within a mile of the largest ranch in Arizona in broad daylight. There were 20 cowboys in the ranch at the time, and all fully armed, and yet the Indians went into camp and cooked the meat, and some time during the night left; and during all this time not the slightest attempt was made to interfere with them, or even to give information to troops. The Indians having returned to Mexico, the troops were sent back to their field stations. The scouts having been constantly on the march since the beginning of the operations, and the terms of service of many of them having expired, it was thought best to discharge them and enlist others, and, while the new commands were being organized, as thoroughly as possible refit and reorganize the pack trains, which by this time were almost worn out. The new commands were fitted out as soon as possible, and on November 27 Captain Davis again started into Mexico. Captain Crawford was detained by a fruitless pursuit of a raiding party under Josanie, and did not cross the line until about two weeks later.

The raid of the party of eleven Indians who succeeded in eluding the troops on the Line and went up into New Mexico by the Lake Polomas trail, early in November, will not be reported at length, as this raid was mentioned in a special report dated January 11, 1886 (copy herewith, marked E), and the operations incident thereto treated at length. It is mentioned as showing the dangers and difficulties to be contended against from small parties. During the period of about four weeks this band traveled probably not less than one thousand two hundred miles, killed thirty-eight people, captured and wore out probably two hundred and fifty head of stock, and, though twice dismounted, succeeded in crossing back into Mexico with the loss of but one, who was killed by friendly Indians, whose camp they attacked near Fort Apache. At one time it seemed probable that the band would be captured; but the refusal of a party of forty Navajo scouts under Lieutenant Scott, Thirteenth Infantry, to follow the trail, although supported by a troop of cavalry, caused the pursuit to be abandoned, owing to the inability of the troops to follow the trail in the mountains, and a severe storm, with snow and rain, coming on, which lasted for three days, obliterating all trails as fast as made, enabled the raiders to choose their own route into Mexico.

For details connected with the movements of Captain Davis' command in Mexico, I respectfully refer to the attached reports of this officer

(marked F* and G*, respectively). The first expedition of Captain Crawford is well covered by the report of Lieut. Britton Davis, attached (marked H*). It is to be regretted that the death of Captain Crawford, at a time when there is reason to believe that had he lived he would have received the unconditional surrender of Geronimo's and Natchez' bands, has prevented a detailed report of all the operations pertaining to his first expedition. The report of Lieutenant Maus of the events of his second expedition is attached (marked I*). The detailed reports of the engagement with the Indians by Captain Crawford's command, and the subsequent death of this gallant officer in an attack upon his command by a Mexican force, is fully traversed in attached reports of Lieutenant Maus (marked K* and L), who assumed command upon his death.

From these reports it appears that, on the 10th of January, Captain Crawford, after an exceedingly difficult night march, attacked the Indian camp near the Arras River, about sixty miles below Nacori. Though the attack did not result in the destruction of the Indians, for the reason shown, yet the scouts captured all of the hostile stock and supplies of every description, and convinced them that they could never hope to find a secure resting place, and they accordingly asked for a conference with Captain Crawford, to take place the following morning. What its results would have been cannot, of course, be positively stated, but as he was thoroughly known to all the Indians and had their confidence, it is believed that he was the only white man besides myself who could have induced the hostiles to surrender. Unfortunately the scouts, worn out with three days' incessant marching, for forty-eight hours without food, and under the circumstances fearing no attack by the hostiles, did not keep watch with their usual vigilance. The morning of the 11th, before full daylight, they were attacked in their sleep by a force of one hundred and fifty-four Mexicans. By the first volley three of the scouts were wounded before they could get the shelter of the rocks. By the exertions of their officers the firing was stopped and every effort was made to explain to the Mexicans that they were attacking a friendly force. The Mexicans were told in Spanish that the Indians were American scouts and that the officers in command were American officers. During this interval the Mexicans approached so near that their words could be distinguished. Captain Crawford took his position on a rock without arms, within easy speaking distance of them. He pointed out that he was in uniform; at the same time Mr. Horn, the interpreter, was explaining who they were. Suddenly, without warning, a Mexican, within about twenty or thirty yards of Captain Crawford, raised his piece and fired. Crawford fell, shot through the brain. This shot seemed to be the agreed-upon signal, as at once the firing became general. Mr. Horn was shot through the arm, but though the firing lasted for several minutes and was only stopped when the Mexicans had lost their commanding officer and their second in command, and at least two others killed and several wounded, that it was discovered that no one of the scouts had been touched, and had it not been for the exertions of Lieutenants Maus and Shipp and the two chiefs of scouts, who finally succeeded in stopping the firing of the scouts, many more of the attacking party would have been killed. In the light of the events of the day following, when Lieutenant Maus was detained by force in the Mexican camp, and was only allowed to return, when the scouts began to strip for action, upon his word of honor that he would send them six of his eleven pack mules, the conclusion reached by Lieutenant Maus that the Mex-

icans knew whom they were attacking is almost incontrovertible. The death of Captain Crawford was in any event an assassination.

The day following the Mexican attack the hostiles again asked to talk, but Crawford was insensible, practically dead, though his death did not occur until the eighth day, and their interview with Lieutenant Maus only resulted in their expressing a wish for a conference with myself at a point indicated about twenty-five miles south of San Bernardino. This conference took place in the Cañon de los Embudos, on the 25th of March. I found the hostiles encamped on a rocky hill surrounded on all sides by ravines and cañons, through which the hostiles could escape to the higher peaks behind in the event of attack. They were in superb physical condition, armed to the teeth, with all the ammunition they could carry. In manner they were suspicious and at the same time independent and self-reliant. Lieutenant Maus with his battalion of scouts was camped on lower ground, separated by a deep rugged cañon from their position, and distant five hundred or six hundred yards. The hostiles refused to allow any nearer approach.

I was conscious that in agreeing to meet them I was placing myself in a position similar to that in which General Canby lost his life, and that any incident which might, with or without cause, excite their suspicion would result in my death, and probably that of some of the officers with me. I therefore endeavored to induce them to meet me within the United States, urging that the presence of white soldiers would prevent any attempt of the Mexicans to attack them. But no argument would move them. Into their hands I must trust myself or back they would go to their mountain fastnesses. The report of the conference has been made in full (a copy is herewith, marked M*). After my first talk it seemed as if they would accept no terms other than that they be allowed to return to the reservation upon the status *ante bellum*. This I positively declined, and the conference broke up. That night I got emissaries into their camp, but the hostiles were so excited that they would listen to nothing. The Indians whom I had employed told me that they did not dare even talk to them about surrendering. Geronimo told his people to keep their guns in their hands and to be ready to shoot at a moment's notice.

The Indians said that the slightest circumstance which would look suspicious would be a signal for firing to begin; that they would kill all they could, and scatter in the mountains. Even after they surrendered to me they did not cease their vigilance. They kept mounted men constantly on the watch; there were never more than from five to eight of their men in our camp at one time, and even after the march northward began, the hostiles did not keep together but scattered over the country in parties of two and three. At night they camped in the same way, and, had I desired, it would have been an absolute impossibility to have seized more than a half a dozen of them. The remainder would have escaped and one breach of faith would have prevented forever any possibility of any settlement with them.

The last conference with the hostiles took place on the afternoon of March 27. That night whisky or mescal was smuggled into their camp and many of them were drunk. The next morning Chihuahua reported the fact, but told me they would all begin the move to the border. In order that I might be within telegraphic condition with the War Department, I deemed it essential that I should return to Fort Bowie immediately, and I accordingly left the camp, leaving my interpreter and

the trusted Indians whom I had employed in my negotiations with Lieutenant Maus, who, with his battalion of scouts, was to conduct the hostiles to Fort Bowie. The first day the command marched to the Supply Camp, about twelve miles south of San Bernardino, and the next day they camped at the Smuggler's Springs, near the border. Owing to the persistent sale of intoxicating liquors to the Indians by a man named Tribolet, I gave directions that the ranch should be so guarded that no liquor could be obtained by the Indians. It seems that from the time the scouts had been in camp south of San Bernardino, this man had been selling them large quantities of liquor, and that when the hostiles came in he began selling to them, and boasted on the large amount of money he was making on the traffic. The exertions of Lieutenant Maus and his officers did not prevent the hostiles obtaining liquor from the same source the night of the 29th, though the day before, all which could be found by careful search, some fifteen gallons, had been destroyed.

The night of the 29th the hostiles were apparently sober, and two dispatches from Lieutenant Maus (copies attached, marked N* and O*) indicated that there would be no difficulty in continuing the march without trouble. But the Indians were in that condition of mind that any remarks with reference to what would happen to them when they finally got into my power excited them. It is understood, and I believe, that such remarks were made by interested parties, and that, in consequence thereof, Geronimo and Natchez with twenty bucks stampered some time during the night, taking with them two horses and one mule, and fourteen women and two young boys. Several days afterwards two of these men returned, and said they were sleeping together and heard people leaving camp, and supposed something was wrong and left also, but the next morning they concluded that there was no reason for their leaving, and started back, joining Lieutenant Maus about 15 miles from this post. After the most careful inquiry, I am satisfied that no one in the camp except those who left knew anything about it until next morning, and it is probable that a number of those leaving were frightened out at the last moment. Under the circumstances it would have been impossible to have prevented their escaping. Lieutenant Maus with eighty scouts of his battalion immediately started in pursuit. For the detail of his march see accompanying report (marked P*). Captain Dorst, Fourth Cavalry, with the First Battalion of Indian scouts, were also put on the trail. The result of his scout has not yet been reported.

The remainder of the prisoners arrived at Fort Bowie on April 2, and on the 7th instant, in compliance with telegraphic instructions of the Secretary of War, left Bowie Station under charge of First Lieut. J. B. Richard, jr., Fourth Cavalry, under escort of a company of the Eighth Infantry, for Fort Marion, Saint Augustine, Fla. They numbered seventy-seven—fifteen bucks, thirty-three women, and twenty-nine children.

Among the warriors sent to Fort Marion are Chihuahua and his brother Josanie, who led the raid in November and December, and also several others of almost equal prominence—the Indians say the bravest and ablest of the hostiles. With the prisoners are two wives and three children of Geronimo, the family of Natchez, and also families or relatives of all the hostiles who remain out. By this surrender the entering wedge has been well driven, and it is believed that there will be but little difficulty in obtaining the surrender of those still remaining out.

The latter consist of Geronimo and Natchez with eighteen men. Mangus with three men are also out, but where is not known, he having separated from the other Indians in August last, since which time nothing has been heard of him. There is no evidence showing that his band has had any part in the outrages committed by the other renegades, and he will doubtless surrender when he can be communicated with.

There were thirty-four men and eight well-grown boys who left the reservation in May last, and two boys have since grown large enough to carry arms, making forty-four in all. There are now in Geronimo's party twenty; with Mangus, four; total, twenty-four.

Before closing this report I desire to express my appreciation of the conduct of the officers and men of my command during the many months they have been engaged in this discouraging and well-nigh hopeless task. Where all have done well it seems invidious to mention individuals, but, while my thanks are due to all, it seems proper to mention the names of Capt. Wirt Davis, Fourth Cavalry; the lamented Crawford, who sleeps in a soldier's grave; First Lieut. M. W. Day, Ninth Cavalry; First Lieut. M. P. Maus, First Infantry; Lieuts. Britton Davis, Third Cavalry; C. P. Elliott, R. D. Walsh, and H. C. Benson, Fourth Cavalry; Leighton Finley and W. E. Shipp, Tenth Cavalry; and S. L. Faison, First Infantry, who commanded expeditions or scout companies in Mexico and bore uncomplainingly the almost incredible fatigues and privations as well as the dangers incident to their operations.

Very respectfully, your obedient servant,

GEORGE CROOK,

Brigadier-General, Commanding.

ADJUTANT-GENERAL, DIVISION OF THE PACIFIC,

Presidio of San Francisco, Cal.

L.—REPORT OF LIEUTENANT MAUS.

CAMP ON SAN BERNARDINO RIVER, MEXICO;

February 23, 1886.

SIR: I have the honor to submit the following more complete report of the attack of the Mexican troops on this command while in camp on the 11th of January, 1886, at that time it being impossible to make a complete or clear report.

After the fight with the hostiles on the 10th ultimo, about 12 o'clock m., the command went into camp a short distance above the place occupied by the hostiles at the time of attack. Such of their camp outfit as was useless to the scouts was destroyed. The command at this time was worn out by constant moving since the preceding day about 11 a. m., since which time it had no food. Our packs, which had been left behind about 10 miles, under the charge of Dr. T. B. Davis and some scouts, did not arrive that night, although they had been sent for. Some dried meat and venison found in the hostile camp served as a temporary relief to the command. Feeling secure from any attack, and being overcome by fatigue, despite cold and hunger, the scouts seemed to rest well. At this time our force present was as follows, viz: Capt. Emmet Crawford, Third Cavalry, commanding; First Lieut. Marion P. Maus, First Infantry; Second Lieut. W. E. Shipp, Tenth Cavalry; Chief of Scouts Thomas Horn and William Harrison; Hospital Steward Nemeck; and seventy-nine scouts.

At about daylight the following morning, while Captain Crawford, Lieutenant Shipp, and I were lying by a fire, Lieutenant Shipp and I being awake, loud cries of alarm came from some of the scouts who were lying down among the rocks. Lieutenant Shipp, Mr. Horn, and I ran forward at once to ascertain the cause of the alarm, when a severe fire of musketry was opened on our camp. The scouts first said it was Captain Davis's scouts, who were operating in Chihuahua; but in a few moments we found the attack was made by Mexican troops. We all endeavored to stop the fight at once, calling loudly to the Mexicans who we were, part of the scouts aiding, repeating clearly "Soldados Americanos." Quite a number of the scouts had run to the rocks without arms. One scout was severely wounded by this first volley, while sleeping. The fire was returned by some of the scouts, although by but very few. Captain Crawford ordered it stopped entirely, and by the efforts of the officers it was in about fifteen minutes entirely stopped, the Mexican fire having also ceased. Some Mexicans now advanced, and I felt sure that the trouble was over. Captain Crawford and I then both left the rocks and went towards the nearest two Mexicans, who were only a few yards away. At one time I was within ten yards of one of them. Captain Crawford could not speak Spanish, but made signs, saying in Spanish "Americano soldiero." I told them distinctly who we were, calling attention to our uniform. The captain had on a soldier's uniform and I wore a soldier's overcoat. These men, one of whom was an officer, looked alarmed, evidently surprised at the number of men in the rocks, and kept moving away toward a hill a little higher than our own, saying, "No liras, no liras" ("Do not fire"). I said no, we would not. The hill in question was already occupied by two or three of our scouts, who were lying very close and could not be seen now, as all depended on no shot being fired. Captain Crawford directed me to go back and insure this. I turned back, and had taken but a few steps when one shot sounded, followed immediately by a volley. The Indians say that the single shot killed Captain Crawford. I cannot say, for on reaching the rocks I turned to find him mortally wounded, he having fallen behind a rock which he had probably mounted after I left him, not two minutes before. Firing now became very rapid. Four Mexicans exposed at the time were instantly killed. No power could stop the firing. It seemed indeed a hopeless task to stop this unnecessary bloodshed. We all tried to stop the fight, calling loudly to stop shooting and that we were Americans and friends. At this time it was seen that a party of Mexicans had gone around to our right, evidently with the intention of taking possession of a high point of rocks about 400 yards distant, which commanded our position. This, however, was also occupied by some scouts, and I sent more there. The Mexicans were driven entirely away. This move was certainly made in part during the time the firing had ceased on both sides. I am convinced that our firing, at first being very slight and then stopping, impressed the Mexicans that we were very weak. Before the second attack commenced they could plainly hear all Mr. Horn said to them. The main attacking party was then on a high and well-protected point, in a direct line not over 200 yards away. The firing continued for half an hour or longer; then the Mexicans, beaten and driven back, most of them out of rifle-range and some of them a mile distant, answered our calls, which had been constantly kept up. During the fight the hostiles had assembled on the opposite bank of the river, about a mile distant. They (the Mexicans) were then told not to fire, and Mr. Horn, who speaks Spanish very well, went out at once, and I followed

him and had a talk with the Mexicans. They assured me that they took us for hostile Indians, and deplored in an apparently sincere manner the unfortunate affair. They said they had followed for days this party of savages. This is untrue, as the trail of the hostiles came from west to east, we having struck it north of Sahuaripa (about 25 miles), following it for six days east along the Haros River, until we located the camp; then moving north we had approached the hostile camp from the north. The trail they had followed was our own, *made the night before* the attack of the hostiles' village.

The Mexicans, coming from the north, did not cross the hostile trail at all—a fact I know, as I followed their trail part of the way on my return march towards Nacori. They asked questions about our fight with the hostiles, and were told that all the stock then around our camp was captured from the hostiles. They were told all the incidents of the fight; they could see where the hostiles were. I told them that if they wanted to pursue them, there they were; however, that they had asked for terms of surrender. The Mexicans said that they were in a bad way and wanted to return; that they were without food and transportation, and asked my aid to get them back; also that I permit the doctor to come and dress their wounded, reporting five. I consented to do this when he had come and attended to our own wounded, and also that I would loan them, upon a receipt, six of the captured horses, which were to be returned. But I told them I could give them no rations, as our supply was almost exhausted. They gave me a paper claiming the attack a mistake. Copies of this paper, both in Spanish and English (as well as I can translate it), are appended hereto and marked A and B, respectively. I told them that we were acting on the defensive; that we had to defend ourselves or be killed; and that they had paid no attention to our calls, which they claimed not to have heard. They insisted that I should give them also a paper to show no bad intention on our part, which I was willing to do, as we were attacked and there could be no reason why we should not acknowledge our firing. As well as I can recall the Spanish words and their meaning, the paper was in substance as follows: That on the 11th day of January, 1886, while in camp, our command met unexpectedly the forces of the Mexicans; that we fired, without retreating or turning away. They then asked permission to carry off their dead, and I went with them till they had carried off four bodies. When the packs came up (which was about an hour later) the doctor dressed our wounded, and, at my request, went over later and dressed the Mexican wounded. Our loss in the engagement was Captain Crawford, mortally wounded; Mr. Horn, chief of scouts, slightly, and two scouts slightly wounded and one severely. The Mexican loss, as far as I learned, was four killed and five wounded. A squaw came in from the hostiles during the afternoon, saying they feared to come and talk while the Mexicans were near. I desired to get the Mexicans to move away, as I still hoped the surrender of the hostiles probable, discouraged as they were, without food and without shelter since the capture of their camp. I therefore ordered six of the captured horses to be sent to the Mexicans the following morning, the scouts being unable to get them that night. In the mean time we must move. Our rations would only last at best two days more; our supply of ammunition, *which was only one belt to each Indian*, had been largely consumed in the two fights, and, if needed, none to refill them. Our pack train was left in camp about 16 miles south of Nacori.

On the 8th ultimo, while we were following the Indian trail, five scouts were sent back with instructions for the pack train to go to Nacori, get supplies, then move south till our trail was struck, and follow it. Under

ordinarily favorable conditions in that rough country, it might be a week reaching us at this time. Having consulted with the doctor, I decided to move the next day, making litters to carry the wounded. Canes were procured in the morning, which, by wrapping in bundles of five, litters were made. Six horses had been sent the Mexicans, and they having declined to come down the hill to receive them, the horses were brought back. The scouts reporting some of the captured herd on the hills near the Mexicans, I sent Concepcion, the interpreter of Apache, and who is a Mexican by birth, to drive them back, it not being desirable to send Indian scouts. Being myself busily engaged, my attention was called to his loud calling. I went out, finding that he said he could not return. I went over further, not understanding this, and as I alone could speak Spanish, Mr. Horn then suffering from his wounds, I did not think of their detaining me. They said, "Come up; we want to see you about the horses." I had forgotten about them. They spoke in a reassuring manner, saying they were friends when I reached them. This party consisted of only a half dozen or more; and as it was raining, they asked me to come under the shelter of a large overhanging rock which was about 30 yards distant. Here I found about fifty men, most of them with their arms inclined against the rock. They said, "Now we must settle this business about the horses." I said I was willing to do so. I told them that I had ordered horses to be sent them, and asked why they did not take them. They said they were not brought up to them. Concepcion was with me at the time. I said I would give them the horses, and that I would go and get them, and turned to go. They detained me. I said then, "Do you mean to say I cannot leave here?" They answered in the affirmative. I then sent Concepcion to camp for the horses. He came back, bringing them. The Mexicans refused to take them, saying they were worthless. The scouts had selected the worst, and they were not serviceable. I then sent for more, but the scouts objected, as they considered these animals their property, and it was considered best not to insist on their being sent. I then said, "Here are your horses; I can do no more." They now demanded my right in Mexico. I told them by the right of treaty, which they ought to know. They asked for my papers. I had none, all having been left with the pack train by Captain Crawford. They said my men were not their friends. They then asked where the train was. I told them it was sent to Nacori for supplies. Then they said that I should go to Nacori with them; that I should bring all the Americans to camp with them; that they wanted mules to take their wounded and the doctor to care for them, and at Nacori rations; but that the Indians must not camp with them, as they were afraid of the Indians. My position was indeed helpless. I offered to send for my papers, and I warned them that I was an American officer, and that my command, though Indians, were also Americans. I wore the uniform of my country, and I told them to beware how they treated me; that I had a lawful right to be in Mexico. I remembered that Captain Crawford had received a letter, the same day we struck the Indian trail, from the president of Chahuaripa, which acknowledged us Americans operating against hostiles. It contained information concerning Indian depredations. I spoke to the Mexicans of this letter, and they permitted Concepcion to go for it. It was read to them, but they seemed not to appreciate it. (Appended hereto, marked H.) During the time Concepcion was waiting for the letter in our camp he told the Indians what the Mexicans said, and also that I was a prisoner. Then their excitement became intense. They said they would rather go out on the mountains than go out with these Mexicans. They began

stripping for a fight, taking position in the rocks, shouting defiantly to them, shaking their fists at them, and using some Mexican words which they knew. They had been closely watching the Mexicans all the time. They said they did not fire for fear that Concepcion and I might be killed; and, indeed, if they had done so, I could not have blamed them. Here were these scouts, only a short time before most wisely reclaimed from their savage state and made American soldiers, showing a greater sense of honor and justice in their conduct than men who were supposed to be civilized. These Indians, who had been given the task of hunting down the renegades; directing where they were to be found in Mexico; then, finding their trail, guiding us day and night over a country so broken as to make the march even in daylight painfully laborious, till their stronghold was found; then, having fought them and so discouraged them, by taking away the few comforts that even an Indian must have, as to make them sue for terms of peace, it seemed that neither the uniform nor the protection of the United States could save them from the murderous attacks and annoyance of men they were brought to look upon as friends and allies.

The Mexicans, who were observing the scouts, now called my attention to them and their evident hostility towards them, as indicated by their manner. I told the Mexican that I was detained in their camp, and of course could not control the Indians where I was; but if back with my command, I could do so. A second fight must necessarily be very unfortunate in the condition the command was in at the time. Moreover, the commencement would, I am sure, have been the signal for my death and that of Concepcion. In fact, I had already felt we would not be allowed to return. Then I said, "You had better let me return; I can control my men;" and that I would, on my word of honor, send them six mules which belonged to the Government of the United States. They then said that I might go, but they kept Concepcion, apparently as a guarantee.

I sent the mules, and told them to release Concepcion, which they did. Order was now restored. It was now too late to move that day, and I had to lie over until the next day. I had no further verbal communication with them. I wrote, however, a note, saying, as well as I could in Spanish, that I would remain with my command, and would send for my papers; that if they demanded more of me they would cause trouble; and if they persisted in doing so, I would call on the military authorities of Sonora; and, in compliance with my word, that I would give them rations at Nacori, where they were going. I was then informed that they would not interfere with me.

I also wrote for a receipt, which I had not yet received, for the mules that I sent them. A copy of this receipt is hereto appended and marked I.

I wrote them further that I was satisfied, but for them not to move at the same time that I did. I kept no copies of these simple notes, as, indeed, I had no time to make them, and I wrote them in very crude Spanish, having no dictionary with me.

I am convinced that to the hostile demonstration of the scouts I owe my release, as the Mexicans certainly feared a fresh conflict and appreciated the necessity of my release. I am willing to admit that the first attack was through a mistake as to our identity, for it was early and misty. I certainly desire to be just to these men, but it is impossible for me to believe that they were laboring under any such mistake at the time of the second attack, in which Captain Crawford received a wound which cost him his life.

The dishonorable and treacherous conduct of these men toward me after the fight shows plainly their character. They had no right to demand anything of me. They attacked us while peacefully resting in camp.

In justice to this command, I have endeavored to give you here all the details of this most unfortunate affair.

I submit statements of Lieutenant Shipp, Chief of Scouts Horn and Harrison, Hospital Steward Nemeck, and of the Interpreter Concepcion, which statements are hereto appended and marked C, D, E, F, and G, respectively.

I have the honor to be, very respectfully, your obedient servant,

MARION P. MAUS,

Lieutenant First Infantry, Commanding.

Capt. C. S. ROBERTS,

Seventeenth Infantry A. A. D. C., Fort Bowie, Arz.

A.

Hoy, 11 Enero de 1886, dijo yo, Santana Perez, que impensadamente nos hermos conrado en el Rio de Haros con la fuerza de Americanos y la fuerza de indios soldados, que vernendo nosotros, los Mexicanos, hermos tirado quen (?) tomarnos los (h)unos y los (h)otros par podemos ver a tiempo.

Sr. Capitan CRAWFORD.

Sr. Don Tenienta MAUS.

SANTANA PEREZ.

B (translation of A).

To-day, the 11th of January, 1886, I, Santana Perez, state that accidentally we have met on the Haros River a force of Americans and of Indian soldiers, and, advancing, we fired upon them, without any of us turning back, as we could not see at the time.

SANTANA PEREZ.

To Captain CRAWFORD; Lieutenant MAUS.

The pencil copy I send is the original copy, on which is seen in spelling some words an "h" is prefixed incorrectly.

M. P. MAUS,

Lieutenant.

C.

CAMP ON VIEGO RIVER, SONORA, MEXICO,
January 20, 1886.

Lieut. M. P. MAUS,

First Infantry, Commanding Second Battalion Indian Scouts:

SIR: I have the honor to make the following statement: On the morning of January 10, 1886, Captain Crawford's command of Indian scouts captured the camp of the hostile Indians on the Haros River, in Sonora, Mexico. There were present eighty-one scouts; Captain Crawford, Third Cavalry; First Lieut. M. P. Maus, First Infantry; Second Lieut. W. E. Shipp, Tenth Cavalry; Mr. Thomas Horn, Mr. William Harrison, and Second Class Hospital Steward Nemeck, Troop G, Fourth Cavalry.

The command went into camp near the old hostile camp, and Captain Crawford sent two scouts to bring up the pack mules, which had been left in the rear the preceding day. About 7 a. m., January 11, the scouts cried out that a great many Mexican soldiers were coming. Lieutenant Maus, Mr. Horn, and I ran forward to let them know who we were. Captain Crawford was lying down and did not get up immediately. The Mexicans commenced firing on the scouts at short range.

The latter took refuge in the rocks and returned the fire. Lieutenant Maus, Mr. Horn, and I meanwhile kept calling out who we were. Calls had been made before

the firing commenced. We tried to stop the shooting on both sides, but the Mexicans were so near that it was a matter of absolute necessity for the scouts to protect themselves. The Indians did very little shooting at this time, and acted strictly on the defensive. After some time the firing ceased, and we continued calling out that we were American soldiers. At this time I saw Captain Crawford standing on a rock about 20 yards in rear of me. A small party of Mexicans was near, and while Mr. Horn was talking to them in Spanish they, without warning, opened fire on us, giving Captain Crawford a mortal wound in the head and slightly wounding Mr. Horn in the arm. The men who did this shooting were not 30 yards from us, and I cannot believe that they thought we were Indians. Captain Crawford's entire person was exposed, and his face and dress could not be mistaken for those of an Indian. He wore a soldier's uniform and a brown campaign hat, and he had a good deal of beard on his face. Mr. Horn was dressed in civilian's clothes, and while talking held his hat in his hand. I was near him, and wore a brown canvas coat, blue trousers, and a brown hat. I was unarmed.

I know of no demonstration on the part of the scouts which could furnish a cause for this attack in the midst of our talk. The firing then recommenced on both sides, and continued at intervals for more than an hour. Captain Crawford was not conscious after he was shot, but the remaining officers and Mr. Horn did their best to put an end to the fight, continually restraining the scouts and calling to the Mexicans. We had a very strong position in the rocks, and the Mexicans, failing to dislodge us, finally withdrew to a hill about 500 yards distant. Mr. Horn, who speaks Spanish well, then succeeded in getting an answer to his repeated calls. He went unarmed to the Mexican camp and was soon followed by Lieutenant Maus. From this time there was no more firing. One scout was severely wounded while in bed, at the beginning of the fight, and two others were slightly wounded. That they did not suffer more was due to the protection afforded by the rocks. I saw three dead Mexicans. The scouts who were near Captain Crawford say that one of these was the man who shot him. When Lieutenant Maus went to the Mexicans, after the fight, he left me in charge of the camp, and I had no communication with the Mexicans then or afterwards. I left this camp on the morning of January 13. The scouts behaved admirably. Although we tried to stop the fight, it was impossible to prevent some firing by them; but they did no more than was necessary for self-defense. I saw no white man fire. I feel constrained to make special mention of the admirable service rendered by Mr. Horn, and of his bravery and coolness, although wounded. The Mexicans may have originally thought our scouts were hostiles, but there was no reason why they should not have immediately discovered their error. The presence of six white men, whom they were obliged to see, and the continued calls made to them in Spanish and English, which they certainly heard, make any excuse impossible.

The shooting of Captain Crawford by a man not 25 yards distant seems a deliberate assassination.

Very respectfully, your obedient servant,

W. E. SHIPP,
Second Lieutenant Tenth Cavalry.

D.

Statement of Mr. Thomas Horn concerning the engagement between American and Mexican forces about 60 miles southeast of Nacori, Sonora, Mexico, January 11, 1886.

CAMP ON SAN BERNARDINO RIVER, MEXICO,
February 23, 1886.

About the time it was daylight on the 11th of January, while in camp, I heard the Indians say there were Mexican soldiers coming; then, in about two minutes, that they were Major Davis's scouts; and they then shouted to them, thinking they were Major Davis's scouts, in Apache language, and the Mexicans, which they proved to be, answered by a volley of shots. We had then found out that they were Mexicans. Captain Crawford hollered to me to go ahead and speak to them; by that time they were within 100 yards of our camp. I spoke to one of them, and he had his gun up to his shoulder; he took it down, looked at me, and then took deliberate aim and fired at me, wounding me in the arm. Then the Indians told me that Captain Crawford was killed. Then the Indians began fighting in earnest, as it appeared that the Mexicans wanted to kill us. Up to this time the Indians had fired very little. I shouted to the Mexicans for an hour, but could get no answer, and after we had driven them all away from us they answered. I told them to stop shooting and I would come over. I told them we were an American force of Indian soldiers, with American officers; that we had fought the hostiles the day before, and that the animals we had were taken from them. Lieutenant Maus came over and spoke to the officer in command of the Mexican troops, which they said they were. They said that they thought we were

hostile Indians, and I asked them if they did not know an American from a broncho at 25 yards. Then they gave Lieutenant Maus a paper, saying they did not recognize us, and said they saw the Indians' heads in the rocks, taking them for hostiles. But I was on a rock in plain sight, and so were Captain Crawford and Lieutenant Maus at the time. I did not see Captain Crawford at the time he was shot, as I was ahead in the rocks, where I had been sent, and was hid then from his view by a ledge of rocks where we went into camp. Several Mexicans said if we had not had enough, to come out and fight again. I told them we were sent down by General Crook to fight hostile Indians, not Mexicans. At first I believe that they may have been mistaken, at that time of day it being misty. But when they came to camp all firing on the part of the Indians had been stopped, and they (the Mexicans) could hear distinctly what I said when I told them we were American soldiers, even those (and there were a large number of them) who were sheltered in the rocks 300 yards away. The Mexicans accused me of killing their captain, both to myself and Lieutenant Maus, which, though false, proves that they recognized me at the time.

THOMAS HORN,
Chief of Indian Scouts and Spanish Interpreter.

E.

*Statement of Chief of Scouts Harrison in regard to the attack of the Mexicans on camp o
scouts, January 11, 1886.*

CAMP NEAR SAN BERNARDINO RIVER, MEXICO,
February 25, 1886.

While in camp on January 11, 1886, about 7 o'clock a. m., I heard the Indians calling "Mexicans!" Captain Crawford said to Lieutenant Maus to go ahead and see about it. Lieutenants Maus and Shipp and Mr. Horn ran forward to the point of rocks. Before any talk, I heard volleys of firing, which was scarcely returned by the scouts, many of whom had gone out to look without their arms. The firing soon ceased for about ten minutes. The orders were for all of us to prevent any firing from the Indians. Loud calls were made by Lieutenant Shipp and Mr. Horn, saying we were American soldiers. Conversation took place between Lieutenant Maus and two of the Mexicans, Captain Crawford telling Lieutenant Maus what to say. These men were very close. What was said I don't know, for I don't understand Spanish.

The Mexicans spoken to answered, "Si, si" ("Yes, yes"), but still kept going off to the left under a tree. One shot was then fired, followed instantly by a volley. The sound of this first shot came from the direction where I first saw the Mexicans. Firing now became severe on both sides, the Mexicans running off, many of them 1,500 yards away. The fire, after about half an hour longer, entirely stopped. Then Mr. Horn went over and a talk took place, after which there was no more firing. I am sure the Mexicans knew who we were before the second attack and the shooting of Captain Crawford.

WILLIAM HARRISON,
Chief of Indian Scouts.

F.

Statement of Second Class Hospital Steward Frank J. Nemeck, private Troop G, Fourth Cavalry.

CAMP ON SAN BERNARDINO RIVER, MEXICO,
February 23, 1886.

On the morning of January 11, 1886, about good daylight, while in camp on the Haros River, I heard the scouts crying out, "Mexican soldiers!" At the time, Captain Crawford told Lieutenant Maus to go and speak to them before they came to camp. Hardly had he started forward when severe firing commenced from the Mexicans into our camp. There were very few shots fired by the scouts at the time, few having guns, as they ran forward to see without their guns.

When the firing opened, the captain and I sought shelter, he telling me not to fire unless they came into camp. Firing ceased for a few seconds. The captain heard Mr. Horn speaking, and thought the Mexicans understood who we were. The captain and I then started forward, and when we had gone about fifteen steps the grass caught near one of the fires, and the captain told me to put it out. I had put out the fire and was starting up to where the Mexicans were coming up towards camp when the fire in the grass broke out again. Just as I started to put it out again, I saw the

captain mounting a big rock, which was in plain sight of the Mexicans. At the time I was putting out the fire, stooping down with my back to a ridge, a bullet whistled past me, striking about a foot to my right, in the fire. I got up, looked around, and saw a Mexican beginning to reload his gun that he had fired. I then took to the rocks for protection, with my gun. Just before reaching the rocks he fired at me again, missing me. He was killed by an Indian scout. I had my back turned to the Mexican, with my undress uniform on at the time. I could not have been taken for a hostile Indian.

The firing lasted, I think, about two hours, and whenever any one exposed himself the Mexicans fired from a point about 200 yards distant.

Orders had been given by the captain and chief of scouts for the Indians to stop firing. I heard continual calling in Mexican by Lieutenant Maus and Mr. Horn, saying we were American soldiers. The Mexicans did not answer until driven off most of them out of rifle-range from camp. After the fight the Mexicans remained on the adjacent hills. I assisted Dr. Davis in dressing the wounds of the Mexicans after the fight, four in number.

FRANK J. NEMECK,
Private Troop G, Fourth Cavalry, Second Class Hospital Steward.

G.

Statement of Concepcion, sergeant Company E, Battalion of Indian Scouts, Mexican interpreter of the Apache language.

CAMP ON SAN BERNARDINO RIVER, MEXICO,
February 23, 1886.

Mr. Horn and I went with six horses of the captured stock, by order of Lieutenant Maus, about two-thirds of the distance to where the Mexicans were, calling to them to come and take them. They said to bring them up there. Mr. Horn said he was no servant for them, and if they would not take them they would have to arrange with the lieutenant. They refused to come and get them, and we went back to camp with the horses.

The next day I went alone to get some of the animals of the Indians that had gone over in the Mexican camp. The Indians were afraid to go. I went over and asked the Mexicans if they had seen the animals. They said they had seen only one. They asked why the lieutenant did not come over and fix about the horses. I said, "Why don't you go and see him? He is looking after the captain, who is wounded. I am going after my stock." Their captain then said to his men, "Don't let this man go away from here; he must die here with us." I said, "What I am going to tell you is the truth. The most of you are gray-headed like I am. We have one God and only one life. When the time comes we will die."

In a little while the captain made me get on a rock and call Lieutenant Maus. I got up and called him, saying I was kept there and could not come until he came and fixed about the horses. Then the lieutenant came, the Mexicans saying, "It is all right; come on; we only want to arrange about the horses." He came up, and they said, "Come behind a rock close by; it is raining and we want shelter." He and I went behind the rock, and over fifty Mexicans surrounded us, making him sit down. They said, "We want to arrange this business." The lieutenant (Maus) said, "All right, hurry up, for I am in a great hurry." They said they wanted horses. He said, "I sent some; why do you not take them?" They said they did not take them because he did not send them clear up to them. He said he would get them the horses, and sent a note by me to camp for them. I told them that the best ones were back of their camp, but they said there were none there. I told them I did not lie; that the horses were there. They sent a man out for them and he brought a mare. I then went and got five more, but when they saw them they would not take them, saying they were no good. Lieutenant Maus said he could do no more.

They said they were going to Nacori with us; that the lieutenant, the doctor, and I should stay with them; and that they wanted rations and mules to carry their wounded; and that the Indians should not camp with them. They said we had no right in Mexico, and asked Lieutenant Maus for his papers. He said that they were left with the pack train. He said he had a letter from the president of Sahuaripa, and he sent me for it. When I went back to camp I told the Indians that the Mexicans were going to Nacori with us. They said they would not go with the Mexicans, but would go out into the mountains sooner. When the Indians were mounting the rocks and stripping, the Mexicans called Lieutenant Maus's attention to it. He said, "Well, you keep me here; I can't control them while here. They are not like white soldiers." The lieutenant started to go, but the Mexicans said, "No." He promised them if

they would let us go back to our camp he would lend them six mules. They then let him go, but they kept me a prisoner until he sent the mules. They then let me go, telling me all was right.

CONCEPCION (his x mark),
Apache Interpreter.

Signature witnessed by me this 24th day of February, 1886. I certify this is a correct translation of the statement of Concepcion, Apache interpreter.

THOMAS HORN,
Chief of Scouts, Spanish Interpreter.

H.

ENÉRO 2 de 1886.

Sr. Captain EMMET CRAWFORD,
Donde se halle:

MUY SR. MIO: He tenido el honor de recibir la grata de Ud. fecha de ayer, en la que se sirve avisarme que marcha con una fuerza americana y soldados indios en direccion á Sahuaripa, y que le mande noticia de los movimientos de los barbaros y de los rancherias que haya por acá.

Obsequianda seis deseos, le manifestaré que la opinion mas fundada de personas conocedoras del leirna es que los indios pueden encontrarse arranchados en las sieras de "Badese," á la "junta de los rios," y que de allí se desprenden partidas á las cercanias de estas poblaciones donde cometen sus asesinatos y depredacion es.

Ayer mismo recibí parte de la hacienda de Guisamopa, distante doce leguas al S.E. de esta cabecera, en el que se me dice que un dia ántes sintieron rumores de Indios, por aquellos rumbos Ud. vera que estos salvagis estan disemniados en piqueñas partidas.

Mando al Co. José Gonzalez portador de la presente con un pignete de 14 nacionales, y él dará á U. S. noticias verbales sobre el particular.

Está ocasion se me presenta para suscribir mé de U. S. off. amigo y S. S.

A. F. PERCHAS.

I.

ENÉRO, 12, 1886.

Hoy recibí yo del teniente Maus, ejercito de los Estados Unidos—

Six (6) mulas (de gobierno), cuatro (4) aparejos, dos (2) sillas, seis (6) presadas, ocho (8) macatas, cuatro (4) coronas, dos (2) frenos, cinco (5) martegones, dos (2) mantas.

SANTANA PEREZ.

A true copy of report and appendices.

C. S. ROBERTS,
Captain Seventeenth Infantry, A. A. D. C.

REPORT OF BRIGADIER-GENERAL MILES.

HEADQUARTERS DEPARTMENT OF ARIZONA,
Albuquerque, N. Mex., September 18, 1886.

SIR: I have the honor to submit my annual report, as follows:

After rendering my report of last September, while in command of the Department of the Missouri, and until assigned to this department, there was nothing of importance coming under my observation requiring especial mention.

On the 2d of April last I received the following dispatch:

WASHINGTON, D. C., April 2, 1886.

General N. A. MILES,
Fort Leavenworth, Kans.:

Orders of this day assign you to command the Department of Arizona, to relieve General Crook. Instructions will be sent you.

R. C. DRUM,
Adjutant-General.

And on the 5th of April I received the following instructions:

HEADQUARTERS OF THE ARMY,
Washington, D. C., April 3, 1886.

General NELSON A. MILES,
Fort Leavenworth, Kans. :

The Lieutenant-General directs that on assuming command of the Department of Arizona you fix your headquarters temporarily at or near some point on the Southern Pacific Railroad.

He directs that the greatest care be taken to prevent the spread of hostilities among the friendly Indians in your command, and that the most vigorous operations looking to the destruction or capture of the hostiles be ceaselessly carried on. He does not wish to embarrass you by undertaking at this distance to give specific instructions in relation to operations against the hostiles, but it is deemed advisable to suggest the necessity of making active and prominent use of the regular troops of your command. It is desired that you proceed to Arizona as soon as practicable.

R. C. DRUM,
Adjutant-General.

With as little delay as practicable, I proceeded to Fort Bowie, Arizona, and assumed command of the department April 12, 1886.

At that time there was trouble threatened with the Ute Indians in Southern Colorado and with the powerful tribe of Navajos in New Mexico and Arizona. These tribes had been formerly within my control, and I was familiar with the questions in dispute between them and the white settlers.

While *en route* to Arizona I gave the necessary directions for placing troops in their vicinity, and assigned to Col. L. P. Bradley, commanding the District of New Mexico, the more immediate responsibility of their supervision. He made such use of his troops, in concert with the measures adopted by the Interior Department, that peace was preserved. These are powerful tribes, occupying the Rocky Mountain region. The Navajos alone number 20,000 souls. There are 47,000 Indians in this department, located in sections of a territory 300,000 square miles in extent.

Soon after assuming command of this department my attention was chiefly turned to the hostile element of the Chiricahua and Warm Springs Indians, whose depredations and atrocities had spread a feeling of insecurity and alarm through all the scattered settlements. A more terror-stricken class of people than the citizens of these Territories I have never found in any section of the country.

Many of the industrial interests—mining, agriculture, and pastoral—had been abandoned, and the troops were much discouraged. During the year the hostile Indians had killed one hundred and forty persons, and an impression seemed to prevail that the natural obstacles were too great to be overcome in the subjugation of this race of most savage mountaineers. One difficult feature of this problem was found to be the small number of the hostiles, and the fact that they roamed over the most rugged mountain region on the continent, embracing an area of 600 miles north and south and 400 miles east and west. In physical excellence and as mountain climbers they probably have no superiors on earth. Their transportation consisted of any animals they could steal, and they subsisted by preying upon herds of cattle and flocks of sheep in the valleys, and by securing their natural food of field-mice, rabbits, seeds, desert fruit, and the substance of mescal and the fruit of the giant cactus, found amid the highest ranges.

The small number of the hostiles necessitated the dispersion of the commands over a vast area of country, to give confidence, security, and protection to the settlements, miners, prospectors, &c., and at the same

time placing them where they could be most available to act against these hostiles.

On the 20th of April I issued the following general order:

[General Field Orders No. 7.]

HEADQUARTERS DEPARTMENT OF ARIZONA, IN THE FIELD,
Fort Bowie, Ariz., April 20, 1886.

The following instructions are issued for the information and guidance of troops serving in the southern portions of Arizona and New Mexico.

The chief object of the troops will be to capture or destroy any band of hostile Apache Indians found in this section of country; and to this end the most vigorous and persistent efforts will be required of all officers and soldiers until the object is accomplished.

To better facilitate this duty, and afford as far as practicable protection to the scattered settlements, the territory is subdivided into districts of observation as shown upon maps furnished by the Department engineer officer, and will be placed under commanding officers to be hereafter designated.

Each command will have a sufficient number of troops and the necessary transportation to thoroughly examine the district of country to which it is assigned, and will be expected to keep such section clear of hostile Indians.

The signal detachments will be placed upon the highest peaks and prominent lookouts, to discover any movement of Indians and to transmit messages between the different camps.

The infantry will be used in hunting through the groups and ranges of mountains, the resorts of the Indians, occupying the important passes in the mountains, guarding supplies, &c.

A sufficient number of reliable Indians will be used as auxiliaries to discover any signs of hostile Indians, and as trailers.

The cavalry will be used in light scouting parties, with a sufficient force held in readiness at all times to make the most persistent and effective pursuit.

To avoid any advantage the Indians may have by a relay of horses, where a troop or squadron commander is near the hostile Indians he will be justified in dismounting one-half of his command and selecting the lightest and best riders to make pursuit by the most vigorous forced marches, until the strength of all the animals of his command shall have been exhausted.

In this way a command should, under a judicious leader, capture a band of Indians or drive them from 150 to 200 miles in forty-eight hours through a country favorable for cavalry movements; and the horses of the troops will be trained for this purpose.

All commanding officers will make themselves thoroughly familiar with the section of country under their charge, and will use every means to give timely information regarding the movements of hostile Indians to their superiors or others acting in concert with them, in order that fresh troops may intercept the hostiles or take up the pursuit.

Commanding officers are expected to continue a pursuit until capture, or until they are assured a fresh command is on the trail.

All camps and movements of troops will be concealed as far as possible, and every effort will be made at all times by the troops to discover hostile Indians before being seen by them.

To avoid ammunition getting into the hands of the hostile Indians every cartridge will be rigidly accounted for, and when they are used in the field the empty shells will be effectually destroyed.

Friendly relations will be encouraged between the troops and citizens of the country, and all facilities rendered for the prompt interchange of reliable information regarding the movements of hostile Indians.

Field reports will be made on the 10th, 20th, and 30th of each month, giving the exact location of troops and the strength and condition of commands.

By command of Brigadier-General Miles:

WM. A. THOMPSON,
Captain Fourth Cavalry, A. A. G.

The districts of observation were placed under command of experienced officers, and sufficient troops were given to each to enable him to make his district untenable for any hostile bands.

Early in April I decided to make prominent use of the Signal Service, and so notified the Chief Signal Officer of that Bureau, and in an-

swer to my request he furnished me ample men and appliances for making that service most useful and effective.

Each troop of cavalry and company of infantry was fully equipped with the necessary supplies and transportation for effective service.

The hostiles were at that time under Chiefs Geronimo and Natchez, son of Cochise, the hereditary chief of the Chiricahua Indians. Under the terms of our treaty our troops were allowed to follow a trail of Indians south of the Mexican border, and the Mexican Government being at that time embarrassed by a war with the Yaquis, a powerful race of Indians living in Southern Sonora, had withdrawn nearly all its troops from the border, leaving the people of Sonora in an exposed and almost defenseless condition. I made such disposition of our troops as would give the best protection to our own citizens, and organized an effective force to pursue them when in Old Mexico. For this purpose I selected Capt. H. W. Lawton, Fourth Cavalry, an officer who had a brilliant record during the war, whose splendid physique, character, and high attainments as an officer and commander peculiarly fitted him for one of the most difficult undertakings to which an officer could be assigned. He also possessed another element of success in believing that the Indians could be out-manuevered, worn down, and subjugated. His command was comprised of picked cavalry and infantry, scouts, guides, &c., with a pack train capable of carrying two months provisions, with the necessary ammunition and medical supplies. Before this command was organized the Indians assumed hostilities, making simultaneous attacks at three points in Central Sonora, from near the Mexican border to 150 miles south of that line.

This raid spread terror throughout that district of Mexico. The hostiles swept northward, and on the 27th of April invaded our territory, passing down the Santa Cruz Valley, stealing stock and killing a few citizens, including the Peck family. The mother and child were murdered, and a girl of some ten years of age captured, but subsequently recaptured. The father was captured and held for several hours, but by some strange freak was finally released by the Indians. At this point they struck a section of our country further west than they had appeared in for many years, not, however, without opposition. Capt. T. C. Lebo, with his troop, Tenth Cavalry, was quickly on the trail, and after a hot pursuit of 200 miles brought them to bay in the Pinito Mountains, some 30 miles south of the boundary in Sonora. In this rapid march and encounter Captain Lebo displayed his usual energy, good judgment, and gallantly, and, although engaging a hostile adversary on grounds of their own choosing and with every natural obstacle against him, he made a good fight, inflicting some loss and sustaining very slight loss to his own command. During the engagement Corporal Scott, a brave soldier, was severely wounded and lay disabled under a sharp fire of the Indians, and Lieut. Powhatan H. Clarke, a gallant young officer, distinguished himself by rushing forward and with his own hands and at the risk of his life carried the disabled soldier to a place of safety. A youth thus rescuing a veteran under a severe fire indicates that the days of chivalry have not passed.

After the engagement the Indians continued their retreat, and the trail was soon after taken up by Lieut. H. C. Benson, Fourth Cavalry, a very enterprising young officer of Capt. Lawton's command, who during this entire campaign has rendered most difficult and valuable services. They were then pursued south and west. Their trail was again taken up by Lebo's command and later by Captain Lawton, and they were finally, on May 15, intercepted by the command of Capt. O. A. P. Hatfield,

Fourth Cavalry, which had been placed to intercept them east of Santa Cruz, Sonora. The hostiles were completely surprised, Captain Hatfield's command capturing their entire camp equipage and about twenty horses. At this fight the hostiles lost their first deserter, who, having his horse shot under him, crawled into the rocks and continued his retreat for forty-five days, surrendering at Fort Apache, 250 miles north, on the 28th day of June. Unfortunately, while passing west through a deep and narrow cañon, towards Santa Cruz, embarrassed with his captured property and Indian horses, Captain Hatfield's command was attacked by the hostiles and a sharp fight ensued. There were several cases of conspicuous bravery displayed in this fight. The action of Sergeant Samuel H. Craig was most heroic and very worthy of praise. First Sergeant Samuel Adams and Citizen Packer George Bowman exposed their lives in attempting to rescue John H. Conradi, of that troop, who lay seriously wounded on the ground, but still using his rifle to good effect. This act of bravery and heroism would have been richly rewarded had not this unfortunate soldier received a mortal wound as he was being borne from the field by his devoted comrades.

After Hatfield's fight, Lieut. R. A. Brown, Fourth Cavalry, an enterprising young officer, with a small command, struck the trail and pursued the hostiles in an easterly direction with good effect. The hostiles then divided, and a part struck north, passing through the Dragoon, Caesura, and Santa Teresa Mountains. While these movements were being conducted, preparations were made to prevent the Indians at the different agencies affording the hostiles any assistance in men, ammunition, or provisions, and on the 3d day of May I went as far north as Fort Thomas, Arizona, and there met Capt. F. E. Pierce, commanding at San Carlos Agency, and Lieut. Col. J. F. Wade, commanding at Fort Apache.

Soon after assuming command of the department, I became convinced that there could be no permanent peace or lasting settlement of the chronic condition of warfare that had for centuries afflicted the territories now comprising Arizona and New Mexico and the bordering Mexican States until the hostile Apache Indians then on the war-path were captured or destroyed and those at the agencies entirely removed from that mountainous region. The trails they had made in past years showed that their raids had been from the agency through the settlements and back again to that source of evil, and every few years their boys became full-fledged warriors, who, in order to achieve distinction according to the traditions and practices of their fathers, were compelled to commit savage acts of devastation.

I then informed Colonel Wade that he should make it his duty not only to prevent any communication between the hostiles and the Indians on his reservation, but that he should exert his utmost energy to bring the camp of Chiricahua, and Warm Springs, who were then not only mounted but still armed, and liable at any time to assume hostilities, entirely under his control, and gain their confidence if possible, but at least to obtain such control over them as would enable him to remove them from the Territory in case he received an order from me to that effect, and furnished him additional troops to accomplish that object. That duty could not have been assigned to a more efficient, judicious, and determined officer.

Captain Pierce, who is by appointment of the President in charge of the civil administration of the San Carlos and White Mountain Indians, and who is a very faithful and efficient officer, fully concurred with me

in the importance of the work, and actively co-operated in the enterprise. The matter was kept a secret and every effort was made to bring about the desired result.

I return again to the movements of the hostile Indians, who were now divided into two bands. The one moving north through the Dragoon Mountains was intercepted by Lieut. L. M. Brett, Second Cavalry, they crossing the Southern Pacific Railroad near Dragoon Summit, thence passing north to a point west of Fort Grant, Arizona.

In this pursuit Lieutenant Brett displayed great energy and determination. The Indians, going over the roughest mountains, breaking down one set of horses, would abandon them and pass straight over the highest ranges and steal others in the valleys below, while the troops, in order to pursue them, were obliged to send their horses around the impassable mountain heights, and followed the trail on foot, climbing in the ascent and sliding in the descent. He went at one time twenty-six hours without halt, and was without water during eighteen hours in the intense heat of that season. When they were in the mountains west of Fort Grant, Lieut. L. P. Hunt, Tenth Cavalry, took up the trail, and later the pursuit was continued by Lieuts. R. D. Read, jr., S. D. Freeman, J. W. Watson, J. B. Hughes, and W. E. Shipp, Tenth Cavalry; Lieut. A. T. Dean, Fourth Cavalry; and Lieut. G. W. Ruthers, Eighth Infantry; and Capt. S. T. Norvell, Tenth Cavalry; and when near Fort Apache all the horses then in the hands of the hostile raiding party were captured by Capt. J. T. Morrison, Tenth Cavalry. The Indians then turned south, and the pursuit was again continued by troops under Capt. Allen Smith, Fourth Cavalry; Capt. G. C. Doane, Second Cavalry; Lieut. W. E. Wilder, Fourth Cavalry, and others. They finally recrossed the Mexican boundary.

The other party or band of hostiles were followed west by Lieutenant Brown until the trail was struck by Captain Lawton. They were turned north by the movement of the troops under Capt. A. E. Wood, Fourth Cavalry, and Lieut. William Davis, jr., Tenth Cavalry, and then entered our territory again east of Oro Blanco, Ariz.

There the pursuit was taken up by Captain Lebo and Lieutenants Davis and Clarke, Tenth Cavalry, and followed through the Santa Rita, Whetstone, Santa Catalina, and Rincon Mountains.

When in the Catalina Mountains they were attacked by a body of citizens under Messrs. Samaniego and Leatherwood, from Tucson, Ariz., and a boy who had been recently captured by them was recaptured. They were pressed south by Captain Lebo and Lieutenant Davis, Captain Lawton and Lieut. John Bigelow, jr., Tenth Cavalry, and in passing through the Patagonia Mountains they were intercepted by Lieut. R. D. Walsh, Fourth Cavalry, June 6, with a loss of much of their equipments and stock. They were then pursued by Captain Lawton and Capt. J. G. MacAdams, Second Cavalry, into Sonora, for the second time. These movements occurred in the districts commanded by Colonels Royall, Shafter, Wade, and Mills, who made excellent dispositions of their troops.

From that time Captain Lawton, with a fresh command, assumed the arduous and difficult task of pursuing them continuously through the broken, mountainous country of Sonora for nearly three months.

In this remarkable pursuit he followed them from one range of mountains to another, over the highest peaks, often 9,000 and 10,000 feet above the level of the sea, and frequently in the depths of the cañons, where the heat in July and August was of tropical intensity.

A portion of the command leading on the trail were without rations for five days, three days being the longest continuous period. They subsisted on two or three deer killed by the scouts, and mule meat with, out salt. The pack trains had been delayed by the roughness of the road and the difficulty in following the trail.

A portion of Captain Lawton's command consisted of picked infantry, a part of the time under command of Lieuts. Henry Johnson, jr., and C. P. Terrett, Eighth Infantry; Lieut. H. C. Benson, Fourth Cavalry; Assistant Surgeon Leonard Wood, Lieut. T. J. Clay, Tenth Infantry; and Lieuts. J. J. Haden and S. E. Smiley, Eighth Infantry.

These men made marches where it was impossible to move cavalry or pack trains; but their laborious and valuable efforts were crippled by the miserable shoes, made at and furnished from the military prison at Fort Leavenworth, Kansas. The worthless material frequently fell to pieces in three or four days' marching. This not only occasioned unjust expense to the soldiers, but caused them unnecessary and cruel hardship and suffering. His scouts and trailers performed very difficult service, under Lieut. Leighton Finley, Tenth Cavalry.

The troops suffered somewhat from fever, but fortunately they were very strong men and endured their hardships with commendable fortitude. When on the Yaqui River and in the district of Moctezuma, the hostile camp was surprised and attacked by Captain Lawton's command. The Indians escaped among the rocks, but their entire property, with the exception of what they could carry, was captured, including all their horses. They scattered in every direction, but whenever this occurred the troops followed the trail of a single Indian until they came together again. They committed several murders and many depredations in the districts of Sahuaripa, Ures, Moctezuma, and Arizpe, in the State of Sonora, Mexico, and moved rapidly north by a march of nearly 300 miles to the vicinity of Fronteras, in Arizpe, district Sonora. Meanwhile the concentration of our troops in the vicinity of the hostile camp, the rapid movement of two troops of cavalry under Lieut. Col. George A. Forsyth, Fourth Cavalry, from Fort Huachuca, the movement of Lieut. James Parker, Fourth Cavalry, from the east, and Lieuts. James Lockett and W. E. Wilder, Fourth Cavalry, with his own and Lieut. D. N. McDonald's troop, Fourth Cavalry, from Fort Bowie to that point, and the very vigorous and rapid movement of Captain Lawton in following them up from the south, were most threatening to the Indians, and had a most discouraging effect upon them.

During their raids in the United States Territories fourteen persons were reported killed by the hostiles; in their raids through the Mexican States their depredations were still greater.

During the time the hostiles were 300 miles south of the Mexican boundary, and when a temporary peace and security prevailed in our own Territories I turned my attention more particularly to the removal of the Chiricahua and Warm Springs Indians, as their camps have been the place of refuge for the hostiles for years.

In my visit to Fort Apache, the honorable Secretary of the Interior very kindly sent his secretary, Mr. L. Q. C. Lamar, jr., to accompany me. This secured a co-operation of that Department, and avoided any conflict of opinion or authority. I made a very careful examination into the condition of the Chiricahua and Warm Springs Apaches. I found over four hundred men, women, and children, and a more turbulent and dissipated body of Indians I have never met. Some of them, chiefly women, were industrious. They had raised a little barley, but much of their earnings and crops went for trifles and "tisin" drinks. Riots and bloodshed were not infrequent.

These people were on paper prisoners of war, yet they had never been disarmed or dismounted, and the stillness of the nights was often broken by the discharge of rifles and pistols in their savage orgies. The indolent and vicious young men and boys were just the material to furnish warriors for the future, and these people, although fed and clothed by the Government, had been conspiring against its authority. They had been in communication with the hostiles, and some of them had been plotting an extensive outbreak. Being fully confirmed in opinion that the permanent peace of these Territories required the removal of these tribes from the mountains of Arizona, I sent a delegation of both Chiricahua and Warm Springs Indians to Washington, under charge of Captain Dorst, to confer with the authorities with a view of some location being selected for them where they would no longer be a disturbing element. My first intention was to have them moved to some place east of New Mexico, all their arms taken away, the most of their children scattered through the industrial Indian schools, and, should they consent to go peaceably, enough domestic stock, money, and farming utensils given them to make them self-sustaining, and such disposition made of the hostiles as should subsequently be determined upon by the Government as most advisable.

There were ten men sent to Washington, and the number included several of the principal leaders and some of the most dangerous characters. Nothing was accomplished at Washington, and the delegation was ordered back to Arizona. Against this I telegraphed an earnest protest, giving as a reason that if these Indians returned to Arizona, in defiance of the military authorities and the appeals of the people for their removal, outbreaks and disturbances might be expected for the next twenty years; that their presence had been a menace to the peace of this country; and that in my opinion there could be no hardship in retaining a handful of Indians at Carlisle, Pa., until a question involving the lives, property, and peace of the people of this section of the country could be satisfactorily decided.

This had the desired effect of stopping their return—not, however, until they had reached Kansas on their way to Arizona.

They were then independent and defiant, and their return to the mountains about Apache, under the circumstances, would have been worse than the letting loose of that number of wild beasts. I then asked that Capt. J. H. Dorst, Fourth Cavalry, who had charge of them, be ordered to report to me, and I also ordered Lieutenant-Colonel Wade, commanding at Fort Apache, to report to me at Albuquerque, N. Mex. The importance of the measure then appeared to me sufficient for taking very decided action.

Captain Dorst was directed to return to Fort Leavenworth and inform those Indians that they could be either friendly treaty Indians or individuals; that they could conform to the wishes of the Government and people, and consent to the peaceable removal of the Indians referred to from these Territories, or they could return and be held responsible for their crimes. As the principals had committed scores of murders, and warrants for their arrest were awaiting them—and they could not expect the military to shelter them from the just and legal action of the civil courts—the effect of this plain talk was the absolute submission of the Indians to any disposition the Government might decide to make of them. They agreed to go to any place that I might designate, there to wait until such time as the Government should provide them a permanent reservation, and funds, domestic stock, and utensils by which they could become self-sustaining. This was the first step in that di-

rection that promised ultimate success. In the mean time I had directed Colonel Wade to place those tribes near his post at Apache entirely within his control, and, in addition to the three troops of cavalry and two companies of infantry then under his command, I ordered one troop from San Carlos, two from Fort Thomas, Arizona, and one from Alma, N. Mex., to march to Fort Apache.

This important and difficult service Lieutenant-Colonel Wade performed with good judgment and decision. He placed the Indian men under guard, and moved the entire camp of nearly four hundred persons 100 miles to Holbrook, Ariz., on the Atlantic and Pacific Railroad, and thence by rail, via Albuquerque, Saint Louis, and Atlanta, to Fort Marion, Florida. This I regard as one of the most difficult duties that can be required of a commanding officer, and it was accomplished with complete success.

While at Fort Apache, July 1, I learned, from one of the Apaches who left Geronimo's camp after Captain Hatfield's fight, of the weakened condition of the hostiles, and that and other information convinced me that they could not hold out much longer against the zealous and persistent action of the troops, and that they would soon surrender. I selected two Chiricahua Indians from those at Apache, and sent them with Lieut. C. B. Gatewood, Sixth Cavalry, to Fort Bowie, Arizona, and thence south into Sonora.

The effort of a small party of Indians to get through the lines south of Bowie near the boundary, and their action in not committing any depredations, indicated a desire to surrender or get past the troops to the agency. When near Fronteras there was some communication between the Indians and the local authorities regarding terms of peace, but it amounted to nothing, as the Indians would not place themselves in the hands of the Mexicans. During the two days of truce while this matter was being considered, Lieutenant Wilder met two of the Indian women belonging to the hostile camp, and informed them that if they and their people desired to give up they could surrender to the American troops; and when the hostiles withdrew from the vicinity of Fronteras, closely followed by Lawton's command, communication was opened, through means of the two men above referred to, with Lieutenant Gatewood. They were sent forward with a demand for the surrender of the camp. This resulted in their meeting Lieutenant Gatewood, when he rode boldly into their presence, at the risk of his life, and repeated the demand for their surrender. They refused to surrender at once, but they desired to see Captain Lawton, who had pursued them with great pertinacity. Captain Lawton granted the interview, but the Indians asked similar terms and privileges to what they had been given before, and, through the interpreters, sent me two messages and made most urgent appeals to see the department commander. I replied to Captain Lawton that their requests could not be granted, and that he was fully authorized to receive their surrender as prisoners of war to the troops in the field. They were told that the troops were brave and honest men, and that if they threw down their arms and placed themselves at the mercy of the officers they would not be murdered. They promised to surrender to me in person, and for eleven days Captain Lawton's command moved north, Geronimo's and Natchez's camp moving parallel and frequently camping near it. At the request of Captain Lawton, I joined his command on the evening of September 3, at Skelton Cañon, a favorite resort of the Indians in former years, and well suited by name and tradition to witness the closing scenes of such an Indian war.

While *en route* to join Lawton's command, Geronimo had sent his own brother, with the interpreter, to Fort Bowie, to see me, and, if not as a hostage, as an assurance of their submission and desire to surrender, and as an earnest of their good faith.

Soon after reaching Lawton's command Geronimo came into our camp and dismounted; then coming forward unarmed, he recounted his grievances and the cause of his leaving the reservation. He stated that he had been abused and assailed by the officials, and that a plot had been laid to take his life by Chatto and Mickey Free, encouraged by one of the officials; that it was a question whether to die on the war-path or be assassinated; that at that time he was cultivating a crop, and if he had not been driven away he would by this time have been in good circumstances. A part of this story I knew to be true. I informed him that Captain Lawton and Lieutenant Gatewood were honorable men, and that I was there to confirm what they had said to them; that though Captain Lawton, with other troops, had followed and fought them incessantly, yet should they throw down their arms and place themselves entirely at our mercy we should certainly not kill them, but that they must surrender absolutely as prisoners of war to the Federal authorities, and rely upon the Government to treat them fairly and justly. I informed them that I was removing all the Chiricahua and Warm Springs Indians from Arizona, and that they would all be removed from this country at once and for all time. Geronimo replied that he would do whatever I said, obey any order, and bring in his camp early next morning, which he did. Natchez sent in word requesting a pass of twenty days to go to the White Mountains, but this was refused. They had found troops in every valley, and when they saw heliographic communications flashing across every mountain range, Geronimo and others sent word to Natchez that he had better come in at once and surrender. Natchez was wild and suspicious, and evidently feared treachery. He knew that the once noted leader Mangus Colorado had years ago been foully murdered after he had surrendered, and the last hereditary chief of the hostile Apaches hesitated to place himself in the hands of the pale faces. He sent in word that if Geronimo would come out he would return with him. I told Geronimo to go and bring him in, and the two subsequently rode in together, and, dismounting, moved forward, and Natchez formally surrendered his camp. It was then late in the afternoon of September 4, and soon commenced raining in torrents.

Early next morning Natchez's people came in and joined Geronimo's camp, and I immediately started to return to Fort Bowie, distant 65 miles, taking with me Natchez, Geronimo, and four other Indians, reaching there after dark. Captain Lawton following, reached that post three days later. The night before reaching Bowie, three men and three squaws crawled out of Captain Lawton's camp and escaped into the mountains. There was one Mescalero among them, and they have since been trailed towards the Mescalero Agency and it is believed will soon be arrested by the troops. On reaching Fort Bowie the Indians were placed in wagons and sent under heavy guard to Bowie Station, thence by rail to El Paso and San Antonio, Tex. Immediately before and after the surrender several official communications were received regarding these Indians, but their surrender was in accordance with measures I had taken and directions given to bring it about months before, and the direct result of the intrepid zeal and indefatigable efforts of the troops in the field. When they surrendered they had not ammunition enough to make another fight. At the time referred to I did not suppose that the Indians who surrendered or were captured would in

any marked degree be considered different from those hostile Indians who had in the past surrendered to others and to myself in other parts of the country. It is true that they have committed many grievous offenses, and there are some malicious and vicious-looking men and boys in the camp, but Natchez, and Geronimo and his brother do not appear to be among the worst. Since the establishment of the Government there have been two methods or policies of dealing with the Indians—one holding them individually responsible for their acts and amenable to the local laws, subject to arrest and punishment; the other, the almost universal policy—where their offenses have assumed the nature of an insurrection—to use the military forces against them as a people, and by the devastations of war and destruction of their property, and imprisonment of the whole tribe or banishment from their native country, to effectually subjugate and punish them as one body. Such men as Natchez and Geronimo occupy the same status as Red Cloud, who led the Fort Fetterman massacre, Chief Joseph, Rain-in-the-Face, Spotted Eagle, Sitting Bull, and thousands of others, many of whom have burned and mutilated their living victims.

In determining what policy it is legal and judicious to pursue regarding these Indians, it may be well not only to consider the course the Government has pursued heretofore in its relations with Indians, but also the probable effect which any radical departure from established policies would have upon other Indians that may in the future be in hostility to the Government. Should they be held as prisoners of war and never allowed to return again to the Territories of Arizona and New Mexico—and there are military reasons why this would be advisable—I would recommend that their children of suitable ages be placed in the various industrial Indian schools, in order that the rising generation may not suffer from the acts of their fathers, and that their present degraded condition may be materially improved.

Arbitrary and absolute banishment is a severe punishment for any people, and its effect upon neighboring tribes has been very salutary heretofore in other parts of the country.

All of the friendly Indians in this department have been kept under control, and the hostile bands have, "by prominent use of the regular troops," been subjugated and are now prisoners.

These gratifying results have been produced by the most laborious and persistent effort on the part of all—officers and men.

The hostiles fought until the bulk of their ammunition was exhausted, pursued for more than 2,000 miles over the most rugged and sterile districts of the Rocky and Sierra Madre Mountain regions, beneath the burning heat of midsummer, until, worn down and disheartened, they find no place of safety in our country or Mexico, and finally lay down their arms and sue for mercy from the gallant officers and soldiers, who, despite every hardship and adverse circumstance, have achieved the success their endurance and fortitude so richly deserved.

The above is not the only good work accomplished by the disposition of the troops and a thorough system of communication over the different sections of these vast Territories. The military were thus enabled to give substantial protection to the scattered settlements, and, in addition to this, have removed the whole hostile Apache tribe, who have fought the civilized races for three hundred years, from the Territories of Arizona and New Mexico.

This affords the citizens of these Territories great gratification, and the troops a feeling of relief to know that they are away from this part of the United States.

The results of the military operations during the last four months will, I believe, effect a saving for the Government of \$350,000 per annum, and the benefits to the material interests of these Territories can not well be estimated.

I am under obligation to Governor Luis E. Torres, of Sonora, Mexico, for his most courteous and hearty co-operation. His intelligent and liberal construction of the terms of the compact between the two Governments was of very great assistance to our officers in moving troops and supplies through that portion of the country, and was acquiesced in by other Mexican officials. In fact, every assistance within his personal and official powers was rendered by the governor to aid in arresting the common enemy that had for many years disturbed the peace of the two Republics.

To Governor E. G. Ross, of New Mexico, and Governor C. Meyer Zulick, of Arizona, as well as the Territorial officials under them, I am thankful for their fullest sympathy and support.

To the district commanders, Colonels Grierson, Kautz, Shafter, Bradley, and Royall; Lieutenant-Colonels Wade and Morrow; Majors Mills, Beaumont, Van Vliet, and Vance; Captains Tupper, Chaffee, Sprole, and others, I am much indebted for the earnest and judicious use of their troops.

Capt. William A. Thompson, Fourth Cavalry, was appointed acting assistant adjutant-general in the field, and in that capacity rendered most valuable assistance. His personal knowledge of the country and his many soldierly qualities have rendered his services most valuable.

Lieutenants Dapray and Stanton have each rendered efficient service in the capacity of aids-de-camp. Reports* of the officers of the general staff are hereby inclosed; also roster of the troops.

Major Barber has discharged the important duties of assistant adjutant-general with fidelity and intelligence, and I inclose herewith his annual reports;* also the report of Col. L. P. Bradley, commanding the District of New Mexico.

Lieutenant Spencer's report* and map will show the various trails of the Indians and routes of march of the troops, and other topographical information that will be found of interest, and when fully developed will be of value in the future.

The reports* of Lieutenants Dravo and Fuller will show the workings of the most interesting and valuable heliographic system that has ever been established. I have made this service useful heretofore, and it would be found valuable in any Indian or foreign war. These officers and the intelligent men under them have made good use of the modern scientific appliances, and are entitled to much credit for their important service.

I would invite special attention to the report* of Major Kimball, chief quartermaster of this Department. This efficient officer has rendered most important assistance in the thorough organization and equipment of the means of transportation and in the prompt and proper disbursement of the public funds, and Lieutenants Benson, Neall, and Patch are entitled to especial mention for their arduous and efficient service as acting assistant quartermasters.

Captain Weston, chief commissary of subsistence, has through his agents kept the scattered camps well supplied.

I inclose herewith the report* of Assistant Surgeon Leonard Wood, who accompanied Captain Lawton's command from the beginning to the end. He not only fulfilled the duties of his profession in his skillful attention to disabled officers and soldiers, but at times performed

* Omitted.

satisfactorily the duties of a line officer, and during the whole extraordinary march, by his example of physical endurance, greatly encouraged others, having voluntarily made many of the longest and most difficult marches on foot.

I also submit the report of Captain Lawton, who has distinguished himself as a resolute and skillful commander. His report of the operations of his command and account of one of the most remarkable marches ever made will be found valuable and interesting.

On the 19th of April last, soon after assuming command and seeing the wants and necessities of the Department, I addressed a letter* to the Adjutant-General of the Army (copy inclosed), and I would respectfully invite attention to that important subject. The recommendations contained in that letter are respectfully renewed. So long as the territory adjacent to the international boundary remains as it is now, the greatest temptation is offered and facilities afforded for marauding bands of outlaws, whether composed of Indians or others of a kindred nature, to make forays from the Mexican side of the line or seek refuge there after devastating the settlements on our own soil, renders the military defenses of paramount importance, and fully justifies the extension of the appropriation for defenses between Texas and Mexico, made a few years since, to this line also.

The scattered settlements and vast material interests of these Territories require that strong military garrisons be maintained at available stations, in order that the lives and property of the citizens, as well as the public interests, may be as secure and well protected here as in other parts of the United States.

Very respectfully, your obedient servant,

NELSON A. MILES,

*Brigadier-General, United States Army,
Commanding Department of Arizona.*

The ASSISTANT ADJUTANT-GENERAL,
Division of the Pacific, Presidio, San Francisco, Cal.

REPORT OF CAPTAIN LAWTON.

EN ROUTE TO FORT MARION, FLA., *September 9, 1886.*

SIR: I have the honor to submit the following report of operations against Geronimo's and Natchez's bands of hostile Indians made by the command organized in compliance with the following order:

Orders No. 58.]

FORT HUACHUCA, *May 4, 1886.*

[Extract.]

1. In compliance with instructions of the Department Commander, Capt. H. W. Lawton, Fourth Cavalry, is hereby relieved from duty at this post and will assume command of an expedition with Mexico against hostile Apaches. Captain Lawton will take the field with the least practicable delay. His command will consist of 35 men of Troop B, Fourth Cavalry (including the 25 men now at Nogales), 20 Indian scouts, 20 men of Company D, Eighth Infantry, and the two pack trains which have just arrived at the post. First Lieut. Henry Johnson, jr., Eighth Infantry; Second Lieut. Leighton Finley, Tenth Cavalry, and Acting Assistant Surgeon Leonard Wood, now at this post, and Second Lieut. H. C. Benson, Fourth Cavalry, now at Nogales, will report to Captain Lawton and be assigned by him to duty. Besides the pack transportation already mentioned, Captain Lawton will take with him the ten mules and two packers now at Nogales and three of the mules and one packer now attached to Company D, Eighth Infantry. The other five pack mules with Aparajos and one packer now attached to this Company, he will turn over to the commanding officer,

* Omitted.

Troop K, Fourth Cavalry, to take the place of those detached from Troop K, and now with Troop B.

The acting commissary of subsistence of the post will at once turn over to Captain Lawton such subsistence supplies as may be required for his command. Captain Lawton will, before his departure, make arrangements with the chief quartermaster of the department for the transportation by citizen wagon train of such additional supplies as he may require.

As to future operations Captain Lawton will be governed by such instructions as he has received from the department commander.

By order of Colonel Royall:

JAMES PARKER,

First Lieutenant and Adjutant Fourth Cavalry, Post Adjutant.

Under instructions from the department commander the command was to confine its operations to the hostiles while they were south of the international boundary line and in their stronghold, the Sierra Madre; and was directed to follow constantly the trail, locate their main camp, and destroy or subdue them.

Contrary to general expectations the hostiles did not return direct to their stronghold after leaving General Crook, but commenced at once a series of desperate raids through Southern Arizona and Northern Sonora. On entering Arizona they were first met by Captain Lebo, Tenth Cavalry, who followed them out of the Territory and fought them in the Penito Mountains, Sonora, about May 3.

My command organized in compliance with the foregoing order, and, supplied with sixty days' rations, marched from Fort Huachuca May 5, directed to take the trail of the hostiles at or near Lebo's battle-ground and follow it up. Lieutenant Benson, with a portion of the cavalry, had gone ahead to locate the trail and was overtaken by the command on May 9.

The country was so rough that mounted troops were unavailable, and on the 10th the cavalry was dismounted, and with the infantry and scouts took the trail and commenced to follow it. From this point a series of long and fatiguing marches were made through the very roughest country imaginable. The Indians frequently doubled on their trail and remained in the same territory for more than a month. On the morning of June 6, while the main portion of the command was lying near Calabasas, Ariz., awaiting the result of a reconnaissance, which was being made by Lieutenant Finley, a report was received that a party of Indians had passed through the Whetstone Mountains, in Arizona, going southward. Lieutenant Walsh, Fourth Cavalry, with a detachment of cavalry and scouts, was dispatched to intercept them. He came upon and surprised the party at dusk that evening, and succeeded in capturing the most of their animals, baggage, and supplies. The hostiles scattered on foot, and by the time the scouts could work out the trail it became too dark to follow. Lieutenant Walsh camped on the trail and at daylight the following morning started in pursuit of the Indians. During the night orders were given Lieutenant Finley to cut the country ahead of Lieutenant Walsh, and I set out to join him (Walsh). I reached him at 8 a. m. June 7, and Lieutenant Finley came up at about 12 o'clock the same day. The command then pushed on with all vigor, following the trail as long as the scouts could see. Camped on the trail and started again in the morning at daylight. The pursuit was kept up until the Indians were forced to abandon all of the animals they had with them, and to scatter again on foot. When the trail was again found it led to the Azul Mountains, and after passing through the range headed southeast. The direction in which the trail led, and the fact that the Indians had entirely disappeared from the border, convinced me that at last

they were going toward their stronghold, and although pursuit was not discontinued nor slackened, active preparations were at once commenced for a campaign in the Sierra Madre. At this time it may be said that the first campaign ended. The term of service of the Indian scouts had nearly expired and a new detachment under Lieutenant Brown, Fourth Cavalry, was sent me; the infantry was replaced by a fresh detachment, and arrangements were made to establish a supply camp as far down as wagons could be taken. While the trail was being constantly followed and the Indians pushed to the utmost of our power, the base of operations was being changed to a point 150 miles south of the national boundary line.

By the 5th of July the Indians had been driven south and east of Oposura, a supply camp established at this point, and the command equipped and ready to continue operations. Up to this time the hostiles had operated in small parties, making sudden and fatal descents upon settlements at unexpected places. Numbers of other commands were in the field and the hostiles were frequently met and pursued by them. During this portion of the campaign my command marched, including side scouts and reconnaissances, 1,396 miles, nearly all of which distance was over rough, high mountains. Most of the country had been burned over, leaving no grass, and water was so scarce that the command frequently suffered greatly. There was accomplished during this period one surprise, and the hostiles were three times placed on foot. They could reap no benefits from their raids, as they were so closely followed that they could not rest for a day, and they were obliged to abandon the animals or fight to protect them; this they carefully avoided. They were obliged to keep a constant and vigilant watch on their back trail and on their camp to prevent surprise. This made it possible for other commands, knowing their course, to fall upon them. Every device known to the Indian was practiced to throw me off their trail, but without avail. My trailers were good, and it was soon proven that there was no spot they could reach where security was assured.

On the 6th of July the command, consisting of infantry and scouts, marched from Oposura. No officer of infantry having been sent with the detachment, and having no officers with the command except Second Lieutenant Brown, Fourth Cavalry, commanding scouts, and Second Lieutenant Walsh, Fourth Cavalry, commanding cavalry, Assistant Surgeon Wood was, at his own request, given command of the infantry.

The work during June having been done by the cavalry, they were too much exhausted to be used again without rest, and they were left in camp at Oposura to recuperate.

The march was directed toward Tepache Creek, where the hostiles had passed, committing some depredations; but having marched in that direction only a couple of hours a courier from the prefect of the district overtook me with the information that a man had been murdered by Indians at Tonababa the evening before. I changed my course to that place, and reaching it found the wounded man, and the scouts soon found the trail of the Indians who had done the shooting. It proved to be but three Indians, two men and one squaw. The trail was followed, however, leading south. Heavy rains came on and washed the already light trail so badly that I almost despaired of being able to follow it; but the trailers succeeded in keeping the general direction, and after some wonderful work, brought me to a point where the small trail joined a much larger one. After this there was no further trouble. The trail led to the Yaqui River, thence up the river, crossing frequently from

side to side. Some evidences of recent camps were found, and the scouts were pushed forward two days ahead of the command.

On the 14th of July a runner was sent back by Lieutenant Brown, of the scouts, with the information that the camp had been located, and that he would attack at once with his scouts, asking for the infantry to be sent forward to his support. I moved forward with the infantry as rapidly as possible, but did not reach Lieutenant Brown until after he had entered the hostile camp. The attacking party had been discovered and all the hostiles escaped. Their animals and camp equipage, with a large amount of dried beef, &c., fell into our hands, but the hostiles scattered and escaped on foot. Their trail was again discovered and followed up the Aros River, thence northwest until the 23d of July. My supplies were nearly exhausted, and the heavy rains threatened a rise of the Aros River in my rear, so I moved back across the stream to meet the fresh supplies which were on the way from the supply camp under escort of the cavalry. During this short campaign the suffering was intense. The country was indescribably rough and the weather swelteringly hot, with heavy rains every day or night. The endurance of the men was tried to the utmost limit. Disabilities, resulting from excessive fatigue, reduced the infantry to 14 men, and they were worn out and without shoes. When the new supplies reached me, July 29, they were returned to the supply camp for rest, and the cavalry under Lieut. A. L. Smith, who had just joined his troop, continued the campaign. Heavy rain having set in, the trail of the hostiles, who were all on foot, was entirely obliterated. Mr. Edwardy, of the scouts, with one man, was dispatched to gain information, and after three days he returned and reported that the Apaches had passed into the district of Ures, and were committing depredations in the vicinity of Tecolote, in the Mazatan Mountains. This point was so far distant that I could not reach it in time to get even a trail fresh enough to follow, and he was again sent to find the whereabouts of the hostiles, going to Ures and following their course. In the mean time scouts were sent in all directions to cut the country for signs. During this time Lieutenant Gatewood, Sixth Cavalry, with two Chiricahua Indians, who had been charged with a mission to enter the hostile camp and demand their surrender, joined me.

On the 13th of August I received information that the hostiles were moving towards the Sierras Mountains, through Campus and Nacosuri. I marched immediately to head them off. By making forced marches I arrived near Fronteras on the 20th of August, and learned that the hostiles had communicated to the Mexicans a desire to surrender. Lieutenant Gatewood went forward at once with his Chiricahuas to communicate with them, but found the Mexican authorities trying to negotiate. Lieutenant Gatewood, however, sent his Indians forward and soon learned that the hostiles had moved their camp, going east. This fact he communicated to me and I moved out on their trail at once, Lieutenant Gatewood also following ahead of me. On the evening of the 24th I came up with Lieutenant Gatewood and found him in communication with the hostiles, but on his return from their camp he reported that they declined to make an unconditional surrender and wished him to bear certain messages to General Miles. I persuaded Gatewood to remain with me, believing that the hostiles would yet come to terms, and in this I was not disappointed. The following morning Geronimo came into camp and intimated his desire to make peace, but wished to see and talk with General Miles. I made an agreement with him that he should come down from the mountains, camp near my command, and await a reply to his request to see and talk with General Miles. After

Geronimo moved near my camp the Mexicans made their appearance near us, which so frightened the hostiles that I agreed that they should move with me towards the United States. General Miles declined to see and talk with the hostiles, unless they gave some positive assurance that they were acting in good faith and intended to surrender when they met him. The hostiles were alarmed at the movement of troops in their vicinity and they agreed to move with me near Fort Bowie, where General Miles then was. The day following they agreed to surrender to General Miles and to do whatever he told them, and Geronimo's brother went to Bowie to assure the general of their good faith. In the mean time, General Miles had started for my camp at the mouth of Skeleton Cañon, which he reached on the evening of September 3. On the 4th September the hostiles surrendered as agreed, and the leading men placed themselves in General Miles's hands and were taken by him to Fort Bowie. The same day I started for Fort Bowie with the main party of Indians, and by making slow marches reached that post on the morning of September 8. This ended the campaign.

The command taking the field May 5, continued almost constantly on the trail of the hostiles until their surrender, more than four months later, with scarcely a day's rest or intermission. It was purely a command of *soldiers*, there being attached to it barely one small detachment of trailers. It was the persistent and untiring labor of this command which proved to the hostiles their insecurity in a country which had heretofore afforded them protection and seemingly rendered pursuit impossible. This command, which fairly run down the hostiles and forced them to seek terms, has clearly demonstrated that our soldiers can operate in any country the Indians may chose for refuge, and may not only cope with them upon their own ground but run down and subdue them.

I desire to particularly invite the attention of the Department Commander to Assistant Surgeon Leonard Wood, the only officer who has been with me through the whole campaign. His courage, energy, and loyal support during the whole time, his encouraging example to the command when work was the hardest and prospects darkest, his thorough confidence and belief in the final success of the expedition, and his untiring efforts to make it so, has placed me under obligations so great that I cannot even express them.

To Lieut. R. D. Walsh, for successfully intercepting a party of hostiles and capturing their animals and equipage, and for continued faithful service when his physical condition was such as would have justified him in asking relief on account of sickness. Lieutenant Walsh has been in the field against these hostile Indians since the outbreak, May 17, 1885, longer than any other officer in the department.

To Lieuts. Leighton Finley, Tenth Cavalry, and R. A. Brown, Fourth Cavalry, for loyal service in command of Indian scouts.

To Lieut. H. C. Benson, Fourth Cavalry, for the able manner in which he kept the command supplied.

To Lieut. A. L. Smith, Fourth Cavalry, for able support as second in command and for volunteering for difficult and hard work in times of emergency.

To detachment Eighth Infantry, which went into the field without an officer of their own regiment or corps to represent them, and during the most severe and important work of the campaign performed their duty loyally and without a murmur.

To Chief Packer William Brown and the packers of his train, for their good work, ready willingness, and good care of their animals.

To scouts William M. Edwardy, W. L. Long, and Jack Wilson, all of whom have ridden day and night, when occasion required it, alone

through a country infested by hostile Indians—particularly to Ed-wardy, who made an unprecedented ride after information—going on the same animal over 450 miles through a mountainous country in less than seven days and nights.

H. W. LAWTON,
Captain Fourth Cavalry.

ADJUTANT-GENERAL DEPARTMENT OF ARIZONA.

[First indorsement.]

HEADQUARTERS DIVISION OF THE PACIFIC,
Presidio of San Francisco, Cal., September 27, 1886.

Respectfully forwarded to the Adjutant-General of the Army.

In a letter dated June 10, 1886, that I wrote the commander of the Department of Arizona, speaking of the numerous reports reflecting upon our soldiers, I used the following language:

While they praise you yourself, they still make flings at the uselessness of the soldiers, and the futility of attempting to do anything with such soldiers as we have.

I write to you, not thinking that you can in any way control or correct reports of this kind, but to encourage you to put as many, both infantry and cavalry, into actual field work as you can, and keep them moving as you have already done with a small force, as actively as possible, until the Indians are tired out and captured.

As in the Seminole war, the Nez Percé campaign, and that of the Piutes and Ban-nocks in 1878, so in this, constant motion will win.

If officers lack interest and energy you know what to do with them. The men will certainly do well under good leaders, and as for Apaches or other Indians out-shoot-ing, out-marching, or out-stripping our men in the long race, I do not believe it.

I am exceedingly gratified at the conduct of Capt. H. W. Lawton and his command as evinced in this report, and particularly as it proved that the insinuations against the efficiency and endurance of our soldiers referred to in my quoted communication were without foundation.

It is noticeable from this report that Captain Lawton is not reponsible for granting conditions to the prisoners of war. I concur with him, commending Assistant Surgeon Leonard Wood, Lieut. R. D. Walsh, and the other officers praised in his report, also the scouts and enlisted men of his command. As he says, they have clearly demonstrated that "our soldiers can operate in any country the Indians may choose for refuge, and not only cope with them upon their own ground, but run down and subdue them."

O. O. HOWARD,
Major-General, Commanding.

For the Lieutenant-General, commanding the Army.

REPORT OF COLONEL BRADLEY.

HEADQUARTERS DISTRICT OF NEW MEXICO,
Santa Fé, N. Mex., September 13, 1886.

SIR: I have the honor to make the following report of the movements of troops, and the condition of the different Indian tribes in the District of New Mexico, since the date of my last report, September 10, 1885.

The troops in the district comprise eleven troops of the Sixth Cavalry, four troops of the Eighth Cavalry, four companies of the Ninth Infantry,

six companies Tenth Infantry, nine companies of the Thirteenth Infantry, seven companies of the Twenty-second Infantry, and four companies of Indian scouts.

More than half of these troops are in the field, and most of them have been continuously in the field for the entire year. These troops have performed a large amount of arduous service, following Indian trails, patrolling a wide extent of southern and western frontier, and occupying remote camps of observation. Most of the camps have been located near the settled portions of the territory, with a view to affording protection to miners and ranchmen.

Since the breaking out of the Apaches, about one year and a quarter since, the cavalry in the field have marched, in troops and detachments, an aggregate of 30,000 miles, and the infantry companies and detachments have marched an aggregate of 8,000 miles.

The cavalry troops have occupied camps at Alma, White House, Seapar, Cummings, Florida Mountains, Hillsboro', and Fairview, but have frequently changed camps for longer or shorter periods to watch exposed points, and occasionally have crossed into Arizona on Indian trails. The infantry companies have been camped at Cloverdale, Eureka, Lang's Ranch, Gila Crossing, Alma, Lake Valley, Datil, Horse Spring, and Turkey Creek. All the infantry companies have been supplied with a small number of packs, and have thoroughly scouted the mountain country in the vicinity of their camps. The cavalry troops are supplied with packs, and most of them have had Indian scouts attached.

The troops and companies serving in the field, most of which have been in camp for a year, are: Sixth Cavalry, Troops A, B, C, D, E, F, G, H, I, K, L; Eighth Cavalry, Troops C, G, H, K; Ninth Infantry, Companies C, E, H, I; Tenth Infantry, Companies B, C, D, F, H, I; Thirteenth Infantry, Companies A, B, C, D, E, F, G, H; Twenty-second Infantry, Companies E, G, H, K.

The infantry companies longest in the field have been relieved by fresh companies from posts.

All the camps mentioned are on the west side of the Rio Grande. The hostile Apaches have never crossed to the east side of the river, but the different fords have been watched to prevent their crossing.

On the 1st of May last, a troop of cavalry and a company of infantry from Fort Stanton were stationed in the San Andreas Mountains, on the east side of the Rio Grande, to watch the country between the mountains and the Rio Grande, and to scout the western and southern part of the mountains.

May 1, a troop of cavalry and a company of infantry from Fort Lewis were ordered into camp on the San Juan River, near the northeast corner of the Navajo Reservation, to watch a portion of the reservation which was in dispute, and which was occupied by both Indians and settlers. This camp has been occupied all summer, and has had the effect of restraining both Indians and whites, and preventing any local disturbances over disputed rights to claims.

The only Indian raids in New Mexico during the past year occurred on the following dates:

September 11, 1885, a band of about nine Chiricabua bucks, with about a dozen women and children, appeared on the Mancho, near Lake Valley, killing a settler and stealing a small band of horses. Captain Fechet, Eighth Cavalry, promptly took the trail after the Indians with a detachment of his troop and a party of citizens, and pushed them rapidly across the Mimbres range to the Mogollans, where the trail was lost in this almost impassable range.

I think this pursuit was made with vigor and determination. The command made seventy-five miles a day over a very rough country, and both horses and mules died on the march.

Four citizens were killed on this raid.

November 1, 1885, Captain Sprole, Eighth Cavalry, struck a trail of hostiles near the San Mateo Mountains, and immediately pursued south as far as the Good sight Mountains, without being able to overtake them, and losing the trail in the night. Major Chaffee found the trail the next day, and pushed the Indians so hard that they could not do any damage on the way, and following them to the Candleria Mountains, in Mexico. About the time this party of Indians was being driven south into Mexico, another party came north from Mexico by way of Lake Palomas, and reached the Florida Mountains before they were discovered. Captain Kendall, Sixth Cavalry, found the trail the morning after the Indians reached the Floridas, and drove them north to the Mimbres Range, where the trail was lost.

These Indians killed one man and one woman in the Florida Mountains.

December 9, 1885, Lieutenant Fountain, Eighth Cavalry, struck a trail of about ten bucks and six women, southwest of the Mogollans, and followed it across the range, where he overtook the Indians and attacked them just at dusk, wounding two bucks and capturing fifteen horses and mules. The night was too dark to pursue, and the command lay on their arms all night, taking up the trail the next morning, but it was found impossible to keep it owing to the rocky country, though Lieutenant Fountain had a detachment of efficient Navajo scouts. Two white men were killed by this band of hostiles before the troops overtook them.

December 19, 1885, Lieutenant Fountain, Eighth Cavalry, with his troop, was ambushed in Dry Creek Cañon, while on the march, and Assistant Surgeon Maddox, United States Army, and four enlisted men of the troop were killed. Lieutenant Fountain promptly attacked the Indians, and drove them from behind the rocks where they had been concealed, killing one Indian, whose body was afterwards found in the neighborhood. Surgeon Maddox is the only commissioned officer killed in New Mexico during the Apache raids. By his death the service lost an officer of great promise and usefulness, and one who was universally esteemed among his brother officers.

December 25, 1885, a small party of Indians entered New Mexico from Arizona, near where the Gila crosses the line, and killed two men near Carlisle. This party moved rapidly south, and were pursued by troops and Indian scouts, but were not overtaken. This is the last party of hostiles known to have been in New Mexico.

December 1, 1885, the District of New Mexico was transferred from the Department of the Missouri to the Department of Arizona.

The following changes of troops have been made in the District since my last report: Company F, Tenth Infantry, from Fort Union to Fort Bliss; Company K, Thirteenth Infantry, from Fort Selden to Fort Leavenworth; Company G, Thirteenth Infantry, from Fort Wingate to Fort Selden; Troop A, Sixth Cavalry, from Fort Wingate to Fort Bayard; Troop I, Sixth Cavalry, from Fort Wingate to Fort Cummings.

The condition of the Indians in the district of New Mexico may be stated as very satisfactory. The Pueblo Indians, numbering 8,000, are, of course, always peaceful, and they are improving in education and the means of comfortable living.

The wealthy and powerful tribe of Navajos, numbering 20,000, half living in New Mexico and half in Arizona, are prosperous, contented, and self-supporting. They are a very useful and capable people, good

stock raisers and farmers, good workers for hire, and many of them fairly skilled in the mechanical arts.

The Navajos are a peaceful tribe, and no fear need be felt that they will not remain peaceful, unless some great injustice is done them in the future. About one-half the Navajos are living off their reservation, as they have always done. The reservation is large enough for the tribe in acres, but it has not sufficient water for the people and their herds and flocks, numbering, probably, 1,500,000 animals. The time is fast approaching when the settlement of the country will press the Navajos back to their reservation, and this time should be provided for by the Government, by building reservoirs and wells on the reservation, to enable this people to continue raising stock and crops for their support. The Navajos have commenced locating farms under the homestead laws, and if encouraged in this, many of them will renounce their tribal relations, and take up the rights and duties of citizenship. The disputed right to a tract of land in the extreme northeastern part of the Navajo Reservation, which has caused frequent local troubles, was settled in April last by an Executive order of the President, restoring these lands to the reservation. There are six settlers still living on these lands, who have filed on their claims, and some of whom have paid for them. Inspectors of the Indian Bureau have recommended that the claims of these settlers be satisfied by the Government in such manner as to extinguish their rights, and this ought to be done without delay.

The Mescalero and Jicarilla Apaches, living on the reservation near Fort Stanton, number about 1,200 people.

They are quiet, and are working sufficiently to aid in their own support, but they will not be self-supporting in a long time, and they must be fed by the Government till they are self-supporting, or there will be trouble, costing vastly more than the cost of feeding them. In the last fiscal year the Mescaleros and Jicarillas received about half-rations, and nothing less than this should be furnished. If these Indians are properly fed there is no reason to fear their doing mischief.

The Southern Utes, living in Southwestern Colorado, number about 1,000, and they are entirely dependent on the Government. They have been neglected in past years, and have come near breaking out several times through starvation. At the beginning of the last fiscal year the Utes received less than half-rations, but after urgent representations the allowance was increased to two-third rations. This tribe should be furnished full rations, and nothing but ample food will keep them on their reservation. They are a spirited and warlike people, and they will not submit to starvation. When their rations fail they leave the reservation, and, as there is but little game in the country, they kill cattle, and this brings them into collision with the whites. There have been no depredations committed by the Southern Utes since my last report, and I do not think they will interfere with the rights or property of their white neighbors if they are properly cared for by the Government.

In concluding this report, I wish to express my appreciation of the patient, willing, and soldierly spirit manifested by the officers and enlisted men under my command during the tedious and harassing service of the last year. The conduct of the troops on continuous field duty deserves acknowledgment and approbation.

Very respectfully, your obedient servant,

L. P. BRADLEY,

Colonel Thirteenth Infantry, Commanding.

The ASSISTANT ADJUTANT-GENERAL,

DEPARTMENT OF ARIZONA,

Whipple Barracks, Arizona.

REPORT OF BRIGADIER-GENERAL GIBBON.

HEADQUARTERS DEPARTMENT OF THE COLUMBIA,
VANCOUVER BARRACKS, WASH. TER'Y,
September 8, 1886.

SIR: I have the honor to submit the following report of operations in this department during the past year:

With the exception of the domestic disturbances incident to the presence of the Chinese population at Tacoma, Seattle, and some other points in the department, everything within its limits has been peaceful and quiet.

THE CHINESE TROUBLES.

In November last the ten companies of the Fourteenth Infantry stationed at Vancouver Barracks were, by orders from the War Department, sent to the city of Seattle, on the representation of the governor of Washington Territory that a repetition of the outrages perpetrated on the Chinese population in the city of Tacoma was apprehended there. The troops arrived in Seattle on the 8th of November, and I reached there that night. Everything was perfectly quiet in the town, and the next day four companies were sent by rail to Tacoma, where, after receiving from the United States marshal certain prisoners arrested by him, they took charge of them, conducted them to Vancouver, Wash. Ter'y, and after turning them over to the United States court, rejoined the post.

There being no disturbances of any kind in Seattle, the six companies remaining there were withdrawn on the 17th of November, and returned to their station, after an absence of ten days, during which no action of any kind was called for on their part.

On the 7th of February, 1886, I received several dispatches from Governor Squire urging the sending of troops at once to Seattle, where a mob was driving the Chinese population out of the city. The troops were at once put in readiness to move, but the governor was informed that they could not move except on the order of the President of the United States. On the 8th still more urgent calls came from the governor and others, and a conflict between the mob and the civil authorities was reported as having taken place.

As it was apparent now that in all probability the question of the troops going to Seattle was one of at most a few hours, eight companies were placed upon a steamer at the post wharf, and arrangements made with the railroad authorities to transport them as speedily as possible on their arrival at Kalama. The troops were so held in readiness until the next day, when the following dispatch was received:

WAR DEPARTMENT,
ADJUTANT-GENERAL'S OFFICE,
Washington, February 9, 1886.

General JOHN GIBBON,
Fort Vancouver, Wash. Ter'y:

The newspapers represent that you have a regiment embarked on a steamboat, and an express train of cars in readiness to convey it to Seattle. While no fault is found with any preparations you may have made in anticipation of orders, the Secretary of War thinks it would have been the part of wisdom to keep secret any contemplated movement of troops, especially connected with civil trouble.

R. C. DRUM,
Adjutant-General.

At 9 p. m., however, of that day (9th) the following was received:

General JOHN GIBBON,
Vancouver Barracks:

ADJUTANT-GENERAL'S OFFICE,
Washington, February 9, 1886.

The Secretary of War directs you to proceed at once in person to Seattle with such troops as may be necessary to suppress domestic violence, and aid the civil authorities in overcoming obstruction to the enforcement of the laws. Report condition of affairs immediately on arrival. The President has issued a proclamation to-night ordering disturbers of the peace to disperse by 6 o'clock in the afternoon of the 10th. Notify all concerned of the issuance of the President's proclamation.

R. C. DRUM,
Adjutant-General.

And the troops were accordingly dispatched that night to Seattle, reaching there the next day.

On my arrival at Seattle, February 10, I found the city under martial law by the proclamation of Governor Squire. Everything was perfectly quiet and peaceful. There was no "domestic violence" to suppress, and no civil authorities to aid in overcoming obstruction to the enforcement of the laws. The city was in possession of the militia organizations, with a provost-marshal appointed by the governor in charge. The city was at once placarded with notices of the President's proclamation, warning all parties to repair to their homes, and abstain from violations of the law. Business houses and saloons were closed at an early hour each day, and patrols of regular troops were constantly on the streets, having relieved the guards of the militia organizations. The governor having transferred the military control of matters to me, I, under existing circumstances, addressed the following letter to him:

SEATTLE, WASH. TER'Y, *February 12, 1886.*

Hon. W. C. SQUIRE,
Governor Washington Territory:

SIR: I have the honor to state that on my arrival in this city on the night of the 10th, I found everything perfectly quiet and peaceful. The city was under martial law and in quiet possession of the troops. At 6 o'clock p. m. on that day there appeared to be no disposition by any one in the city to disregard the command of the President of the United States, and there was no combination which demanded the interposition of troops.

The riotous proceedings which preceded the arrival of the United States troops had entirely disappeared, and the prompt action of some members of the citizen soldiery in repelling an unauthorized interference with their performance of duty seems to have had the wholesome result of convincing all that the citizen who acts on the side of law is doubly armed, and he who acts in opposition to it takes his life in his hands. The persons responsible for the shedding of blood in the streets of Seattle are the *leaders*, who, in defiance of the highest law in the land, undertook, deliberately and with "malice aforethought," to violate that law, and induce others to do it. These, however, are not the ones to suffer when the real conflict comes, as *they* never lead on such occasions, but remain in the rear and allow their braver and more reckless dupes to breast the storm they have themselves raised.

When the first attempt to violate the law was made, had there been present a few good policemen, duly instructed in their duty as guardians of society, there is no question in my mind that no such scene as has disgraced the streets of this city would ever have been enacted, and there never would have been any occasion for the additional disgrace of martial law being proclaimed over the heads of American citizens.

Martial law is, by your proclamation, still in existence, and, in my opinion, advantage should be taken of it to arrest every known leader of the late outrages. These men, who, by inciting others to violations of law, and in some cases aiding in it themselves, are well known to yourself and the civil authorities of this city, and I consider that the welfare of society demands that these men be at once arrested, and held for such disposition as may be deemed proper.

I am here by direction of the President of the United States to aid the civil authorities, and help enforce the law, and this suggestion is made with the firm conviction that it is the best and in fact only way at present of attaining these objects.

I am, governor, very respectfully, your obedient servant,

JOHN GIBBON,
Brigadier-General, Commanding.

The ideas therein advanced being approved by the governor, I immediately proceeded to carry them into effect. A number of the leaders and inciters of the violations of law were arrested by means of the provost-marshal and his civilian assistants and placed under guard.

Whilst these arrests were being made I received the following dispatch:

ADJUTANT-GENERAL'S OFFICE,
Washington, February 16, 1886.

General JOHN GIBBON,
Seattle, Wash. Ter'y:

The remark in a telegram from the governor of Washington Territory to the Secretary of War that "arrests of leaders being made by General Gibbon" creates the impression that you have not clearly comprehended the purpose for which the troops were sent to Seattle. It was not intended that the troops should be used as a *posse* to do those things which the local magistracy are, so far as the authorities here are informed, capable of performing, but to preserve the peace, give security to life and property, and prevent obstruction to the enforcement of the laws. If the condition of affairs at Seattle, or elsewhere in the Territory, was such that the functions of the local judiciary were virtually suspended by acts of violence, and that the ordinary process could not issue, a report of the facts as they existed should have been made, when orders suitable to the condition of affairs would, if deemed necessary, have been issued.

Please inform the War Department fully of the present condition of affairs, and how long the troops will probably be required at Seattle.

R. C. DRUM,
Adjutant-General.

To which, on the same day, I sent the following answer:

SEATTLE, WASH. TER'Y, February 16, 1886.

DRUM, Adjutant-General, Washington, D. C.:

Dispatch of to-day is received. I had already prepared a full report on the situation. This will be sent by telegraph from Portland to-morrow. It is sent there to avoid danger of being divulged. The length of time the troops will probably be required here will depend, in my opinion, upon the answer to the Portland dispatch.

GIBBON,
Brigadier-General, Commanding.

And later, by messenger to Portland, and by telegraph from there, the report referred to, as follows:

HEADQUARTERS DEPARTMENT OF THE COLUMBIA,
Seattle, Wash. Ter'y, February 16, 1886.

General R. C. DRUM,
Adjutant-General, U. S. Army, Washington, D. C.:

I have the honor to report that I arrived here on the night of the 10th inst., preceded some hours by eight companies of the Fourteenth Infantry, under command of Lieutenant-Colonel DeRussy. The troops found the city in a perfectly quiet state, and at 6 p. m. on that day there was no appearance of any mob or turbulence of any kind in opposition to the proclamation of the President.

I found the city under martial law, as proclaimed by Governor Squire, and there has not been since my arrival the slightest difficulty in maintaining the most perfect order and quiet.

The orders sending me stated the objects to be to aid the civil authority and assist in the execution of the laws. The city being under martial law, the only civil authority I could aid was the governor of the Territory; and on his authority I have had, from time to time, a number of the instigators and leaders of the late violations of law arrested and placed under guard, thus preventing them from inciting to further acts of violence and holding them as hostages for the good conduct of their dupes and followers.

From all I can learn the declaration of martial law by the governor was an absolute necessity under the circumstances. The firing of the militia was, I understand, the act of not to exceed three or four determined individuals in resisting an effort of a few of the mob to take their guns from them. It was perfectly justifiable, and for the time being put a stop to the tumult, but immediately afterwards writs were sworn out against several of the members of the militia who were supposed to have fired, and although Chief-Justice Green promptly announced that these men were acting as

officers of his court, their lives were openly threatened if the courts failed to bring them to punishment, when the proclamation of martial law was made amidst intense excitement and put a stop to all further proceedings in that direction.

It has been demonstrated in this community that no one indicted for a crime connected with the anti-Chinese movement can by any possibility be convicted by any jury that can be had here. Although the feeling is almost universal in the community against the presence of the Chinese, there is a strong party (but I think a minority one) in favor of law and order, and the maintenance of the laws and solemn treaty obligations of the United States. Great bitterness of feeling, however, exists between the two parties since the shedding of blood occurred, and the fear now is that as soon as the protection of martial law is removed those who have made themselves prominent in defense of the sacredness of the law and our treaty obligations will be sacrificed to the fury of the disorderly party unless some means are found of punishing those who incited or led others to violations of law. The question becomes all the more grave since on its determination here will, in a great measure, depend the solution at other points on this coast of what is now becoming a great national one.

This Chinese question has become demoralizing to our own people, and is degrading their sense of liberty, justice, and freedom. It has become a common practice for self-appointed regulators to invade private houses and demand the discharge of the servants employed there, and this seems to have been submitted to almost without protest; certainly without the proper kind of protest in a case where the rights of American citizenship have been so grossly outraged.

So far has this gone that the singular spectacle is here presented of a large portion of an American community hailing with every expression of satisfaction, as a relief from worse evils, a state of martial law, the existence of which ordinarily should cause a blush of shame to every American worthy of the name.

Reports are coming in from several other points that the Chinese are being driven away by means similar to those employed here, and the confidence displayed by the lawless element shows that it feels perfect immunity from any punishment by the courts.

The grave character of the question presented here, and at various other points in my department, seems to me to warrant the request that this communication be laid before the President of the United States.

JOHN GIBBON,
Brigadier-General, Commanding.

No reply to this report has been received.

The following day (17th) the United States commissioner for the third judicial district of Washington Territory was authorized to take cognizance of all offenses brought before him for investigation by the United States district attorney and his assistants, and orders were issued to the provost-marshal of the city to turn over to the United States marshal of Washington Territory, on the warrant of the commissioner, nine of the prisoners held under guard.

Appropriate proceedings were had and the various parties disposed of by bail or otherwise in accordance with the decision of the commissioner.

From day to day the stringency of martial law was relaxed; stores and saloons were allowed to reopen, guards were withdrawn, and business was gradually resumed, and on the 22d I stated to the governor that there no longer existed any necessity for martial law. His proclamation removing it appeared in the morning papers the next day, and the civil authorities resumed control of the city.

On the 25th four of the six companies returned to Vancouver Barracks. The remaining four companies were left at Seattle temporarily. Two of these were withdrawn pursuant to instructions from the War Department April 2, and the other two were, by authority from the same source of the 23d, ordered withdrawn on May 5, but the order was subsequently suspended, and the companies were not finally relieved until the 19th of August, and returned to their post after an absence of more than six months.

A report has recently reached me from authentic sources that in the month of August a number of Chinese laborers were expelled

from Douglas Island, in the Territory of Alaska, by an organized party of white men, who acted with great brutality towards their helpless victims. A low estimate of the sacred character of law, and the necessity for its rigid enforcement, furnishes the opportunity for the shiftless and improvident, largely composed of foreign elements, to attempt to dictate as to who shall and who shall not perform certain labor. The most objectionable feature of the transaction is that the very men who violate the law by forcing the Chinese from work are those who are themselves unwilling or incapable of performing it.

INDIANS.

The Indians within the department have continued profoundly peaceful during the year. With two exceptions no reports of threatened outbreaks have been received. One was on the Klamath Reservation, where it was reported, in July last, that trouble between the white settlers and the Indians in the northeastern part of that reservation was imminent, and the assistance of troops was invoked; but the mere presence of the agent was sufficient to settle the difficulty. In an indorsement of the 20th of July I recommended the lines of the reservation should be more distinctly marked to avoid further trouble, and I trust that steps may soon be taken by the Indian Department to that end. The other report was in regard to serious outrages committed by the Calispel Indians, who were said to be murdering settlers and stealing stock to the north of Spokane Falls, Wash. Ter'y.

Early in the spring a troop of cavalry from Fort Cœur d'Alene was sent out to establish a camp near Lake Calispel, in the valley of Clark's Fork, to protect settlers going into that country. That troop was still out there, but the outrages were reported to be taking place at the settlements to the south of the cavalry camp. The reports became so alarming that Colonel Carlin moved two infantry companies out to the locality and found the reports to be entirely wild and utterly groundless. The infantry was moved north until it met the cavalry troop coming south, when the infantry returned to its post. The cavalry has since been withdrawn.

I recommend that the sum of \$1,895.55, expended by the Subsistence Department in feeding the destitute Nez Percé Indians in the vicinity of Fort Spokane last fall, be recovered from the Indian Department.

TROOPS.

In July last the Second Regiment of Infantry, posted at Forts Cœur d'Alene, Spokane, Klamath, Townsend, and Boisé Barracks, was replaced in the department by the Fourth Infantry, which regiment was posted at Forts Cœur d'Alene and Spokane, and Boisé Barracks, thus placing the whole of that regiment at posts in the eastern part of the department, the company of the Second Infantry at Fort Townsend being replaced by Bainbridge's company of the Fourteenth.

On the 10th of May last the post of Fort Klamath was ordered abandoned by the War Department, and turned over to the Interior Department. The division commander decided to transfer the cavalry troop at the post to Fort Bidwell, Cal., about 130 miles distant from Fort Klamath. Before, however, the order was carried into effect, the War Department directed its suspension, and the post is still held by the military.

The troops in the department are in a satisfactory condition. The good results in discipline, drill, and general efficiency resulting from a

concentration of troops into larger garrisons are marked, and still further concentration, as the exigencies of the service will permit, is recommended. The large decrease in the number of desertions in the department during the past year is very gratifying (90 against 165 the previous year). The great reduction made since last year in the number of cases tried (79 by general courts and 122 by minor courts) is also very satisfactory. A total reduction in one year of 201 cases demonstrates the improved state of discipline amongst the troops. An examination of Tables A and B of the department judge-advocate's report shows that the percentage of general court-martial cases is largest at the largest posts, whilst the percentage of minor court cases is the same at the largest and smallest posts in the department. Table D shows that the number of desertions at the smaller posts is disproportionately large. All these facts are arguments in favor of larger garrisons. The number of desertions and the number of trials varies in a remarkable manner between companies even when stationed at the same post, and every endeavor will be made by means of inspections and reports to ascertain any special reasons which may exist to cause excessive desertions and trials in particular organizations. The company with the largest number of desertions (15) and the largest number of trials (68) is Light Battery E, First Artillery (Taylor's). There are six companies with no desertions, H, Second Infantry (Daggett's), E (Trotter's), H, (McConihe's), and K (Carpenter's), Fourteenth Infantry, and F (Eakin's), and L (MacMurray's), First Artillery. B (Dempsey's), Second Infantry, has the smallest number of trials (5). The Second Cavalry has the largest number of desertions (34). The Second Infantry has the largest number of trials (323). The post having the largest number of desertions (though not the largest percentage) is Vancouver Barracks. Fort Klamath has the smallest number (2) and the smallest percentage (2). Vancouver Barracks has the largest number of garrison court cases, though not the largest percentage of cases, which belongs to Fort Cœur d'Alene (88). The smallest number of such cases (27) and the smallest percentage (28) was at Bois  Barracks.

TARGET PRACTICE.

The result of the target practice throughout the department shows a satisfactory improvement, except at the post of Fort Walla Walla, where instructions for increased attention for the coming season have been given.

I do not agree with the views set forth in the report of the inspector of rifle practice regarding the presence of officers as competitors. The efficient use of the rifle is of the highest importance to the soldier, and one of the best methods to instruct the soldier is for his officer to show him that with care and attention he can beat him shooting. No danger to discipline lurks in the fact that the soldier can make himself a superior marksman to his officer.

I agree to the proposition to separate the prizes for skirmish and known-distance firing.

SUPPLIES.

The supplies to the troops have been generally ample and regular.

The transportation in the department must be made an exception to this commendation. Many of the wagons and animals are old and worn out, and some of the mules condemned a year ago as unfit for service have, as a necessity, been retained until fresh ones could be furnished.

Repeated applications for a supply of draft mules have been made, but are up to the present time unfilled.

I indorse the recommendation of the Chief Commissary of Subsistence in regard to amending the law (sec. 1144, Rev. Stat.) by substituting the Commissary-General of Subsistence for the "Inspector-General" as the one to determine the articles to be put upon the list of sales. I also approve his recommendation that tooth brushes, shaving brushes, razors, and toilet paper be placed on the list of articles for sale.

REPORTS.

The reports of the several department staff officers are appended. The various irregularities and defects referred to in the report of the acting inspector-general of the department will be corrected in time, by calling the attention of the post commanders to the matters as they arise.

I am, sir, very respectfully, your obedient servant,

JOHN GIBBON,

Brigadier-General, Commanding.

The ASSISTANT ADJUTANT-GENERAL,

DIVISION OF THE PACIFIC,

Presidio of San Francisco.

REPORT OF COLONEL MERRITT.

HEADQUARTERS U. S. MILITARY ACADEMY,

West Point, N. Y., September 18, 1886.

SIR: I have the honor to submit my report as Superintendent of the Military Academy to cover the period from September 1, 1885, to September 1, 1886.

The total number of officers on duty at the post, including the permanent professors and the two surgeons, is the same as on September 1, last year. During the year 12 officers have been relieved from duty and 12 have reported for duty. The chiefs of two departments of instruction—law, and ordnance and gunnery—are changed to commence September 1.

On September 1, 1885, the total number of cadets present for duty was 313. Since that date the loss has been 17 by resignation, 37 by discharge, 1 by death, and 77 by promotion, making a total of 132. The gain has been 128 admitted new cadets, making the total now present in the corps of cadets 309. This total includes 2 Central American cadets, who are at the Academy receiving instruction under joint resolution of Congress. The strength permitted by statute is a total of 344, exclusive of these last-mentioned cadets.

A few years since there was much discussion as to the requirements for admission of candidates at the preliminary examinations at the Academy. A respectable number of graduates and friends of the Academy contended that the requirements at the preliminary examinations were too great. These were opposed by large numbers, equally respectable in point of ability, who insisted that the preliminary standard was not only not too high, but that from time to time it should be advanced in order that the Academy should produce the best results. The Academic Board has been practically unanimous in this opinion. One of the best

evidences that the preliminary examination is not too high is the fact that without exception Boards of Visitors which have investigated the subject most thoroughly from year to year have invariably agreed with the Academic Board.

While the advanced standard of admission may have improved the character of the attainments in the cases of individual graduates, it cannot be discovered from the records of the Academy that the number who graduate have, owing to the higher standard of the entrance examination, been increased. The number of appointments for the twenty-one years ending with the year 1866 was 2,164. Of this number 1,731 were admitted and 921 graduated, or about 43 per cent. of those appointed finally graduated. In June, 1866, Congress passed the act adding to the educational qualifications for admission, requiring a knowledge of the elements of English grammar, of descriptive geography, particularly of that of the United States, and also of the history of the United States.

For the seven years succeeding the date of the operation of this act—that is, from 1867 to 1873, both years inclusive—845 candidates were appointed to the Academy, and 345 of them were graduated—that is, about 41 per cent. of those who presented themselves for admission at the preliminary examination finally graduated. This is a slight loss. For the ten years commencing with 1873 and including 1882 there were appointed to the Academy 1,570 persons; of these 519, or 33 per cent., graduated. These figures show an important advance in the requirements for graduation over preceding years. It is not, I think, contended by any one that the requirements in this regard are excessive. It is interesting to note, however, that of those appointed after competitive examination, 47 per cent. graduated, while of those appointed without competition only 25 per cent. graduated. In other words, there is a difference of nearly one-half in favor of those succeeding at the Academy who are selected by competitive examinations. In the ten years above considered 269 graduated out of 569 appointed after competition, and 250 graduated out of 1,001 appointed without previous competition. Comment is unnecessary. Now, if it is considered that the method of conducting competitive examinations could be materially improved, the advantages of the system properly conducted must be admitted. Instances are reported when deserving and intelligent lads who pass a perfect examination in the studies required are rejected because of some fancied superiority of physique on the part of one less proficient in studies. Moral character and mental capacity should be the important points in the Congressional competitive examination; for while a well-developed physique is an advantage, its possession for a candidate is an insignificant qualification at the Military Academy as compared with the others mentioned. In other words, the system of training at the Academy can and will develop a youth's physical powers and make a hardy, robust man of a fragile lad, but no means at the disposal of those who conduct the Academy can be used to supply a defective early education, mental or moral.

It is respectfully suggested that the above facts be used in impressing on those on whom the power of appointment devolves the necessity of increased employment of a proper competitive system of appointment to the Academy. It is thought that it might with propriety be made the subject of legislation which would result to the benefit of the Academy, and consequently to the good of the country.

An examination of the records of the Academy develops a fact which if it was more generally recognized would relieve the officers of the

Academy of much useless labor and annoyance, and the friends of deficient cadets of a great deal of fruitless exertion and anxiety. The appointment of a candidate is conditional on his passing the preliminary examination and the appointment as a cadet on passing the first semi-annual examination after his admission—that is, the January examination. The records show that in nine cases out of ten cadets who are of doubtful proficiency at the January examination fail outright before the end of the second year's course; and in cases where cadets weak in their studies have been turned back to resume the course after failure the first year, they seldom succeed in completing more than one step beyond the stage of their original failure. In other words, the first six months' course is a fair test of a youth's ability to succeed, and generally, if his position in his class is doubtful at this time, his deficiency is sure, sooner or later, to find him out. Parents and candidates should remember that, while it is a misfortune to fail in the course at West Point, it is no disgrace; always provided the failure is not due to idleness or vicious habits. They should also cheerfully accept the test and not court, by continuing at the Academy after a first failure, increased confusion and disappointment by repeating the failure which is so sure to follow. Failure after entrance is due either to a lack of application or a want of ability in the special studies taught at West Point. In the first case another trial is undeserved; in the other, for the reasons above given, it should not be desired.

The post surgeon reports the sanitary conditions of the post good. "During the past twelve months," he says, "the prevalent diseases have been of a mild character."

The commandant of cadets, among other things, reports that "instruction has been given in the tactics of the three arms, in the use of the sword, bayonet, and in gymnastics; in military police and discipline; in target practice with small arms (pistol and rifle), with the field guns, machine guns, Hotchkiss mounted rifle, and siege and sea-coast guns and mortars; in mechanical maneuvers with the field, siege, and sea-coast guns and their appurtenances; in swimming, in the regulations, and in giving commands, as prescribed in the Regulations for the Academy and in accordance with orders received from the headquarters United States Military Academy.

Able and diligent instruction and supervision has been given by the assistants in the department, and earnest efforts made to maintain the high standard expected of the corps of cadets.

The course of practical engineering has been comprehensive and thorough, covering the usual course in practical military engineering; and besides the usual instruction in signaling, bridge building, and the fabrication of trench materials, the first class, with the assistance of Company E, Battalion of Engineers, has constructed a model of the Plevna redoubt on a scale of $\frac{1}{12}$, made a field reconnaissance of the ground between Kinsley's Cross-Roads and Fort Putnam; constructed trenches of logs, stones, &c., and a battery for two guns on the line from redoubt Webb to Fort Putnam, and occupied this line with a view to defending it against an enemy supposed to be approaching by the back road.

In May, 1886, each member of the first class, but one, assisted in making a mounted reconnaissance with the prismatic compass and aneroid barometer, distances being estimated by the time occupied in passing over them by the horse at a walk, and checked by odometer readings. From these reconnaissances a road map of the country between the lines of Fort Montgomery and Forest of Dean Mines and West Point was

compiled by Lieutenant Feibeger, Corps of Engineers, and blue prints were made. Each member of the present first class has assisted for one day in the topographical survey of the West Point Reservation now being made by Lieutenant Zinn, receiving instruction in the use of the theodolite and in surveying with the stadia.

I concur with the company commander of Company E, Battalion of Engineers, in the opinion that the company should be increased to seventy-five men. It is now only fifty strong. Its many duties in connection with the care of the forts, guard duty of the post, the instruction of cadets, and the efficient instruction of the company itself in its military duties, make this increase of importance.

The officer in charge of the water supply of the post reports that the supply during the year has been ample and satisfactory. Only minor repairs have been necessary.

Reports as to the insecurity of the Delafield Reservoir having come to me, a board of competent engineer officers was, February, 1886, ordered to investigate and report upon the matter. After a careful survey of the reservoir and measurements of the leakage through the dam and different stages of water for several months, the board reports the reservoir safe and the dam secure. The doubt as to its security arose, it appears, from leakages which have existed from about the time it was originally built. These have not, as far as can be discovered, increased in numbers or size.

The post quartermaster reports the following as a summary of the work done by that department during the past fiscal year and up to September 1 of this year, viz :

Cadet barracks.—Fifty-eight rooms, fourteen halls, and piazza refloored, and the latter repaired; eight flights of stone steps rebuilt; octagon tower reroofed in copper; the outside walls repointed in Portland cement; the walls and woodwork of all rooms and woodwork of halls repainted.

Cadet water-closets.—Forty new water-closets and twelve urinals have been placed in the water-closet, also new floors; ten water-closets reset and floors relaid; six new water-closets were put in and repairs made to the camp closets; 1,490 square feet of cement concrete walk and 1,014 square feet of flagging laid in area of barracks.

The cadet hospital.—Pointed in Portland cement.

Headquarter building.—Pointed in Portland cement.

Guard-house and commandant's office repainted and kalsomined.

Band barracks.—Twenty-four rooms and seven halls refloored and plastered; sinks and water put in basements; ten flights of stairs rebuilt; front porches repaired and refloored; basement area repaved in brick.

Breast-high wall.—Two hundred and forty-four lineal or 2,196 cubic feet of wall with coping built south from south gate; 16,146 cubic feet of dry wall, and 1,028 cubic feet of stone wall in mortar, with coping, were built on road to cemetery; 12½ miles of roads and 4½ of paths have been repaired and kept in order.

Out of the appropriations for the current fiscal year the following repairs have been made to cadet barracks:

Forty-seven rooms and eight halls refloored, also repairs to all locks, doors, and baseboards.

The walls of barrack rooms and halls and all woodwork of barracks inside and out thoroughly painted.

The treasurer of the Academy, who is also the quartermaster and commissary of cadets, makes a most satisfactory report of the affairs under

his control. The cost of subsistence for each cadet per day, for the year past, is less than 53 cents; something less than the cost reported last year.

The candidates this year, under the rule requiring, when practicable, a deposit of \$100 on entering the Academy, made an average deposit of nearly \$96 to each candidate. This is a great improvement over former years, and adds greatly to the thoroughness of their equipment and a proper instruction in due habits of economy.

This year twenty-seven candidates entered the Academy on the 1st of September. Too much cannot be said against permitting these entries. While I write this report, these twenty-seven young men, having lost all the advantages of the instruction of the summer's encampment, are being rigorously drilled as recruits which, of itself, is a sufficient occupation for the hardiest lad for two months at least; but they also are undertaking the, to them, most difficult part of the entire educational course at the Academy. I am sure that this increase of work resulting from a failure to report in June is a fruitful source of failure for September members of every class, besides preventing a better success on the part of those who stay and get through. Friends and relatives of candidates, did they understand these matters fully, would never ask for permission for a candidate to report after the June examination; and I again suggest that, when practicable, the rule be established by the War Department against the custom.

Of the discipline at the Academy it may be said that if it is not all that it should be, the fault must rest at the Academy. The War Department, from the Commander-in-chief down, has uniformly, during my service here, given a cordial and unvarying support to the military and educational branches of control at West Point, so that at this time there is not at the Academy a single cadet who is not here with the consent of the Superintendent and of the Academic Board. So, also, all punishments inflicted on cadets of experience, by court-martial or other authorized power, have been approved and executed without interference from Washington, in spite of great efforts on the part of friends of the offenders to have the punishment set aside. All this has favored an advanced state of discipline and made the duty of the officers responsible comparatively simple. I can only add that up to the last days of the encampment the discipline of the corps seemed perfect. On the 28th of August, however, in connection with the return of the furlough class, there was a lapse in good conduct and subordination which surprised the officers of the Academy and reflected discredit on the discipline of the corps. In reference to this the commandant of cadets reports as follows:

The discipline has been excellent throughout the year, with one exception on the 28th of August, when about thirty-eight cadets, principally first-class men, violated the orders published forbidding old and objectionable customs in regard to the reception of the furlough class.

It is a regret on the part of the commandant that the efforts he has made to inculcate on cadets that obedience to orders is one of the first and highest of soldierly virtues have proved insufficient to prevent this insubordination on the part of so many of the oldest cadets in the corps.

It is pertinent to add that I have ordered six of these offenders for trial before a general court-martial as being especially guilty under Army and Military Academy Regulations as cadet commissioned officers, not only for engaging in and encouraging by their presence this infraction of discipline, but for failing to use their offices and authority in its suppression. There is no question in my mind that they, with their knowledge of facts and authority in their companies, could have pre-

vented the demonstration. The privates of the class and the members of other classes who took culpable part in the affair will be punished by virtue of the authority vested in the Superintendent for this purpose.

In conclusion, I respectfully ask attention to the estimates for construction in addition to the usual estimates for the necessities of the Academy made each year. I have carefully cut these estimates down to the lowest figures, and feel justified in claiming for all presented in this year's estimate the approval of the War Department and the acquiescence of Congress.

I have the honor to be, very respectfully, your obedient servant,

W. MERRITT,

*Colonel Fifth Cavalry, Bvt. Maj. Gen., U. S. A.,
Superintendent Military Academy.*

The ADJUTANT-GENERAL, U. S. A.,
Washington, D. C.

REPORT OF COLONEL TIDBALL.

UNITED STATES ARTILLERY SCHOOL,
Fort Monroe, Va., September 13, 1886.

SIR: At the date of my last annual report the class of officer students were engaged in the course of "Military Art and Science," under Captain and Brevet Major J. H. Calef, Second Artillery, instructor in this department.

In his report Major Calef says:

The course in this department began September 1, 1885, and continued until December 22 (holiday vacation). It was resumed January 6, 1886, and continued till January 15, when it gave way to the course in law; was resumed May 3 and ended June 2, 1886, making a total in time of just five months.

On September 1 Hamley's "Operations of War" was taken up, and being divided into thirty-six lessons, recitations were held daily, Saturdays and Sundays excepted. The members of the class were called on to recite in the following manner, viz: The lessons being divided up into subjects, and each subject being written out in ink on a slip of paper, the members who were to recite were called up in succession and given subjects, which they wrote out on the board, placing also thereon their names and the order in which they were called up. Such notes or memoranda were placed on the board as they saw fit to aid them in their recitations, and they were called on to recite in their regular order, referring to and explaining such maps as might be necessary.

A memorandum in the shape of a mark was kept, indicating the value of the recitation, the marks ranging from 3 maximum to 0 minimum. The whole system, in fact, was similar to that pursued at West Point. After Hamley, Jomini's "Summary of the Art of War," was gone through with in 20 lessons, the same method of recitations obtaining. Then came the pamphlet on "Tactics of Infantry in Battle," by Sir Lumly Graham, which was finished in three recitations.

This was followed by a series of lectures by myself on the following subjects:

- (1) Morale and control of troops in battle.
- (2) Phases of modern infantry fighting on the offensive, and
- (3) Defensive (two days).
- (4) Campaign of Corinth and battle of Iuka.
- (5) Campaign of Vicksburg, first period.
- (6) Campaign of Vicksburg, second period.
- (7) Campaign of Vicksburg, third period.
- (8) Campaign of the battle of Antietam.
- (9) Hood's and Forrest's operations in Tennessee and Georgia, 1864.
- (10) Campaign of Nashville and battle of Franklin and Nashville.
- (11) Jackson's valley campaign.
- (12) Minor operations of war.
- (13) Advanced guards.
- (14) Outposts.

(15) Outpost system of foreign armies.

(16) General functions of the three arms, introducing the elements of time and space with practical illustrations.

During these lectures the officers took notes, and the lectures were made subjects for recitations.

A number of practical problems then came in, using maps photographed by the blue process from War Department maps of the late war. The country taken was the following: The country about Hampton (for a small operation), that between Suffolk and Petersburg, from Alexandria to Fairfax Court-House, from Fredericksburg to Richmond. The last problem was the marching of a mixed command of a regiment of infantry (1,200), a battery of artillery, and a squadron of cavalry, from Fort Monroe, Virginia, to Richmond. This involved all the preparation, subsistence, ammunition, &c.; in fact all the details for active service.

Each of these problems was given out to four officers, in sets of two each, who were to work together (as commanding general and chief-of-staff), and bring in their notes, plans, and orders the next morning. In the mean time a map on a large scale was drawn on the blackboard by one of the detail. At the recitation hour the operation was gone over in detail by each set and the whole thing discussed by the class.

Essays.—The subjects for these were given out in January, 1885, and they were to be handed in on February 1, 1886. On that day the reading of them began, and was continued daily until the list was completed—about a week. Each officer read his own essay in the presence of the staff, the class, and visitors; the idea being that they were for mutual benefit and instruction.

Military geography.—The subject of military geography was then taken up, a lecture on its outlines being given by me, and a tabulated form placed on the board to serve as a guide, &c. Then each officer was given one of the United States, or adjacent territory, such as Canada, Cuba, Mexico, of which to work up the military geography, being aided by Encyclopedia, Physical Geography, Census Reports, Reports of Adjutant-Generals of States, and other reports and books of reference. Each officer read his own paper in the presence of the class, and much interesting and valuable information was elicited.

Then came my book on "Military Policy and Institutions" and "Ancient and Modern Armies," which was taken in twelve lessons and terminated the course.

Remarks.—As the course has been pursued, it is submitted that the principles of the following elements have been presented:

(1) Military geography, a study of the theater of war, its physical features and obstacles, its resources in all the matériel and personnel of war, its facilities for communication and transportation, &c.; in short, combining the strategical and statistical description of the country.

(2) Strategy, the art of so directing masses on the decisive points as to obtain the greatest relative advantage.

(3) Logistics, the details of moving or marching the forces to said points.

(4) Grand tactics, suggesting the "order of battle" which would give the most decided results when collisions occur.

(5) Minor operations of war, by which troops are guarded and rested in camp, protected on the march, information of the enemy and country obtained, the army supplied, and material and prisoners guarded.

(6) Military policy and institutions, in which some of the refinements of the art are presented.

(7) History of ancient and modern armies, by which is imparted the military systems of the most powerful nations, the organization and strength of their armies, with historical sketches of the same.

The course presents a favorable contrast, as far as scope is concerned, to what it was when I took charge of it, it being limited then to only a portion of "Hamley." My effort as an instructor has always been to impress the minds of my students with the principles of the subjects gone over, using our own military history whenever a principle seemed to apply; to enlarge their views and broaden their ideas; encourage them to seek information in any direction attainable. I have always laid much stress on the importance to them of certain branches of the study, particularly the "Minor Operations of War."

Every available facility has been extended to me in the way of books, maps, &c., for carrying out my programme, but I have ever felt the need of a good draughtsman for the construction of maps which cannot be purchased. Officers have from time to time been detailed for the purpose, but their work was necessarily slow and, as a rule, unwillingly rendered on account of their studies and duties. I cannot emphasize too much the necessity for good maps, accurately constructed, for the satisfactory study of military operations.

As the subjects for essays had been given out a year in advance, the students had ample opportunity for their preparation, the result being

an unusually good set of papers—some, indeed, markedly so. The papers in military geography were also very good and show much original research. A number of these essays and papers have been published in brochure form from the Artillery School press. Each officer reads and corrects his own proof, thus affording him a lesson in a very important art.

The examination of this department took place on the 7th and 8th of June.

DEPARTMENT OF LAW.

Instruction in this department followed immediately after the foregoing, and was under Captain and Brevet Major William A. Kobbé, Third Artillery.

In his report Major Kobbé says:

The period assigned for instruction in this course is from January 15 to April 15 during the second of the two class years—about twelve weeks—with additional time for examination.

The course includes constitutional, international, and military law. I had been recently assigned to this course as instructor, with the intimation to remodel it and give it a wider range and scope; to make it, in fact, a post graduate course rather than what it had heretofore been, a rather uninteresting series of recitations from elementary text-books. This would seem to be more desirable from the fact that twelve weeks is a short period in which to discuss, even in an elementary manner, so wide a subject, whereas the time might be employed in an interesting and profitable manner in the examination and discussion of the principal important questions which have been settled or are still pending, especially those having a direct bearing on the often delicate duties of an officer of the Army.

The methods set forth below was that employed by me to this end. It was experimental and imperfect, and will be modified, extended, and improved with additional knowledge and experience on the part of the instructor.

Constitutional law.—January 18 to March 7, inclusive, using “Cooley’s Principles of Constitutional Law” as a guide and to suggest subjects, about five members of the class were required, with the aid of books of reference, to prepare for each recitation and read papers relating to salient and important points. The range of subjects is sufficiently indicated as follows: The common law, history and origin. Colonial government before and during the Revolution. The Confederation and causes of its failure. The adoption of the Constitution (the question of the right of secession). Obscure points in the Constitution. The civil rights bill. The English and American legislative bodies compared. The English and American cabinets compared. The electoral count. Presidential succession. National quarantine. Military reservations, questions under the laws governing. Early State constitutions compared with those of to-day; the tendency to restrict legislative bodies and extend the power of the executive, citing actual examples from modern and recent State constitutions. History and discussion of the electoral commission (Hayes-Tilden). “Civil rights” and “due process of law.” The Supreme Court, its workings as a co-ordinate branch of the Government. Ministerial responsibilities in England and the rise of the English cabinet. The English budget and American appropriation bills, the two financial methods compared. Taxes, the method employed by the States and by the General Government, the vital distinctions between the two. The Army and militia (volunteers).

International law (March 8 to April 3, inclusive).—Lectures by the instructor during which the students took notes on which they were afterwards questioned. The range of subjects is as follows: Is there an international law? War and its declaration. Treaties of peace: the Sherman-Johnston convention. Truces: requisitions, &c. Blockades. Contraband of war. Rights of search. Ship’s papers. Prize and salvage. The declaration of Paris. Privateering. The rights and duties of neutrals. International canals: The Suez Canal in international law; the Panama Canal and the Clayton-Bulwer treaty; the controversy with England.

Military law (April 5, to April 16, inclusive).—Recitations from Ives Military Law, with comparative readings from Winthrop and others. Open discussions in the class in the nature of debates on open questions of law and practice. Actual court-martial cases, especially of officers, read and discussed. Recent modifications in practice. Proposed modifications.

I feel indebted to the commandant of the school for the manifest interest which he has exhibited in the course. A good historical library and a limited number of legal

books of reference on hand at the commencement of recitations were added to from time to time at my suggestion, and valuable works were promptly purchased and made available for the class. I was in correspondence with Professor Snow, of Harvard, and Professor Wilson, of Johns Hopkins, and with others of note and am indebted to them for valuable advice and assistance in the shape of books and pamphlets.

The examination in this department took place on the 22d and 23d of April; after which instruction in the department of military science was resumed as hereinbefore explained.

From June 8th to the 21st, instruction was given by Capt. J. M. Ingalls, First Artillery, in electricity, ballistic machines, and profiling field works.

ELECTRICITY.

Upon the subject of electricity, Captain Ingalls says in his report:

The course in electricity is divided into three parts: Theoretical (applied), and, as a separate specialty, telegraphy, and telephony.

Syllabus of the course in theoretical electricity.—Disturbance of electrical equilibrium by friction. Positive and negative electricities. Theory of electrical potential. Disturbance of electrical equilibrium by chemical action. Current electricity. Electromotive force. Quantity, tension, and intensity. Different kinds of voltaic elements. Comparative electro-motive forces. Local action. Amalgamation of zinc plates. Polarization of plates. Constant elements. Detection and measurement of currents. Action of the current upon the magnet needle. Multipliers. Astatic galvanometer. Electrical resistance. Law of divided currents. Use of shunts. The reflecting galvanometer. C. G. S. units. Tangent and sine galvanometers. Adaptation of galvanometers to circuits. Measurement of resistance. The rheostat. Resistance-coils. Wheatston's bridge. Measurement of electric conductivity. Arrangement of galvanic batteries. Ohm's formula and its discussion. Joining up in series and in multiple arc. Condition of the greatest efficiency.

Syllabus of course in electricity.—Construction and maintenance in working order of the following elements: Daniel's (including the gravity form), Groves's, Bunsen's, Leclanché, and bichromate. Methods of increasing the working power of these elements by combination. Use of tangent galvanometers. Resistance-coils. The ohm. Metallic conductor. Relative value of voltaic batteries. The Wheatston bridge. Construction of fuzes. Testing for resistance. Firing by batteries. Rand and Laffin dynamo. Different forms of electro-magnets. Relays and electro-motors. Telephones. Chronographs.

Telegraphy and telephony.—In this course the minimum proficiency in telegraphy is the sending and receiving five words per minute. Telephony is taught to the non-commissioned officers in order to familiarize them with the use of the instruments before sending them to the targets and firing-stations.

Electrical apparatus.—Nearly all the apparatus for effectively carrying out the different parts of the above syllabus are owned by the school. A sensitive galvanometer for measuring small resistances in connection with the Wheatston bridge is a desideratum. The Bradley tangent galvanometers belonging to the school can hardly be relied upon for resistances less than one ohm.

During the spring months officers who, for want of men, could not be employed at drill exercises, were assigned in turn to instruction in photography, signaling, telegraphy, cordage, and other like branches.

PHOTOGRAPHY.

Major and Brevet Colonel A. C. M. Pennington, Fourth Artillery, in his report on this branch says:

The officers composing the class assembled at the photographic studio on the 15th of March. A lecture upon the subject of photography was given, which embraced the following: General principles governing the subject; the various kinds of lenses and their construction, their special uses; production of the luminous image; securing a glass negative; obtaining a print from negative; manner of manufacturing the dry plate, making of the emulsion for coating it, &c.; construction of the camera, use of ground glass, single and double-swing, &c.; use of diaphragms or stops; focusing the image; construction of the plate-holder and manner of inserting the plates; hints as to the proper length of time to expose dry plate, depending upon strength of light.

&c.; development of the plate to obtain the image; how to mix the developer and proportion of each solution; fixing the plate and drying the same for use.

Each day subsequent to the lecture, except Fridays, Saturdays, and Sundays, two officers were detailed to report to me, and practical instruction was given in taking landscapes, the same general principles governing all photography. They were required to focus the image on the ground glass, shown the method of placing the holder containing the plate on the camera. The plate was exposed and taken to the dark room where it was developed and the process thoroughly explained, including the chemical action on the developer to procure the image. The plate was fixed and the action of the hyposulphite of soda bath used in the process explained, and the plate was placed in the washing box to eliminate the hyposulphite of soda, the effect of any traces of the same being left in the plate being explained.

They were then shown the manner of using the negative to produce the positive print, the appearance of the print when sufficiently printed. The preparation of the toning bath and method of toning was explained; also the fixing of the prints. The albumen paper used in photography was shown and the manner of its preparation explained; the process of silvering it in the silver bath and fuming was illustrated. The ferro-prussiate paper was shown and the process of making blue prints from it was explained; also the manner of preparing the paper. The method of mounting the prints on cardboard and burnishing was explained.

The dry-plate process having superseded the old wet-plate process (the latter being seldom used, except in certain special processes), and as the dry-plate process will answer every requirement for which members of the class will use photography, nothing was done in this branch beyond explaining the processes; albumenizing the plate, pouring on the collodion, dipping it in the nitrate of silver bath to sensitize it, and the method of developing it, as distinguished from the development of dry plate. With the information which the members of the class have acquired, and the aid to be derived from the many hand-books on the subject, they will be able to take up photography successfully.

The gallery is well appointed and thoroughly equipped in every respect, with lenses of the best maker (Dallmeyer), cameras of various sizes, a dark room for wet-plate work and another for dry plates, with a full supply of chemicals, &c., for successful work and instruction.

SIGNALING.

Under the requirements of General Orders No. 109, headquarters of the Army, 1885, Lieut. C. A. Bennett, Third Artillery, was appointed acting signal officer of this post, and has been zealous in his duties as such. In his report he says:

All of the officers at present here under instruction at the artillery school, also most of the non-commissioned officers, received instruction in signaling with the old code in November, 1885. The same officers received instruction in the new code in April, 1886, and the non-commissioned officers have been under instruction from that time to the present. No privates have received instruction. The method of instruction has been generally the same, viz., first, wand practice until a thorough knowledge of the code is obtained, and then practical instruction in signaling.

The method at present employed in instruction of the non-commissioned officers is as follows: The alphabet is divided into four portions, each corresponding to one column of the alphabet on the code card. At least one set of letters is to be learned and practiced each day. These letters are written on slips without regard to order. Each letter appears several times. The class is divided into twos, who signal and receive alternately, with the wand, the letters on these slips. After being able to receive and send readily they receive practical instruction in flag signaling, being taught how to wave the flag, the conventional signals, &c. Flag signaling, both in straight messages and in cipher, is kept up until the men can signal rapidly and accurately. Owing to lack of time there has been no signaling at a distance greater than across the parade ground. There has been no instruction in torch signaling or in signaling with the heliograph.

All the officers of the class have learned the new code. A large majority of the non-commissioned officers have learned the new code and are being taught flag signaling.

TELEGRAPHY.

Capt. J. M. Ingalls, First Artillery, has charge of this branch, and reports as follows:

I have the honor to report that the course in telegraphy, which began January 18, terminated March 13, 1886. First Lieut. George S. Grimes, Second Artillery, who, while on duty in the Signal Corps, had considerable experience in telegraphy, and is an ex-

pert operator, was detailed as instructor, and performed his duties in a satisfactory manner. The instruction was given in the usual manner during the afternoon drill hour to half the class at a time, that being as many as could profitably receive instruction together. The telegraph instruments belonging to the school are ample in number and are of the latest and most approved kind.

Owing to the limited time that could be given to telegraphy, the standard of proficiency was fixed to sending and receiving by ear five words per minute. The following are the names of those who attained to this standard; also the dates when they were reported proficient:

Lieutenant Bennett, February 4; Lieutenant Millar, February 15; Lieutenant Adams, February 24; Lieutenant Blunt, February 24; Lieutenant Williams, February 25; Lieutenant Cronkhite, March 4; Lieutenant Barney, March 11.

HIGH EXPLOSIVES.

During the present year I had collected, by purchase, a quantity of high explosives for the purpose of illustrating to the class and other officers at the post the method of using these powerful compounds—now becoming of such great importance to the military profession—to demonstrate their effectiveness in destroying bridges, aqueduct, docks, and other like structures, perforating iron plates, breaking down stockades, bursting cannon, and demolishing carriages; and also to give an opportunity of seeing and examining these explosives as prepared for use, and the method of exploding them by the safety fuze and caps and by electricity.

The explosives used were of six kinds viz, dynamite, atlas powder, forcite, Noble's explosive gelatine, rackarock, and tonite—all being put up in the form of cartridges of various sizes prepared for "the trade."

The experiments were conducted by Captain Campbell, and each member of the class was required to take notes. Most of these notes were full and complete, evincing the great interest taken in these experiments. One set—those by Lieutenant Macomb—have been printed, and a copy is herewith appended.

Additional material of this kind has been procured and will be used by the present class.

MILITARY EXERCISES.

These have embraced artillery and infantry drills and firings, laying platforms, mounting and dismounting guns, and experiments with high explosives.

Artillery exercises.—These embrace every exercise pertaining to the service, mechanical manoeuvres, and target practice with each piece known to our service. Capt. S. M. Mills, Fifth Artillery, is in charge of this branch. Great importance is attached to firing practice, which takes place during July and August of each year. Captain Mills, in his report, says of this:

Each officer is detailed in succession to perform the various duties of this practice, under the instructors in artillery and engineering in their several specialties, each officer attending personally to such details as is prescribed by these instructors. The officers firing, both before and after firing, inspect the pieces used, employing the instruments used for this purpose. The data obtained to be embodied in firing reports, which is to be made full and comprehensive according to form, with observations upon the action of the powder, projectile, carriage, chasses, primer or friction tubes, fuzes, and other matter necessary to know. This report is submitted to the instructor in artillery, who forwards it to the superintendent of instruction, each supplementing it with such remarks as they may wish to make before transmitting the same to the commandant of the school.

Infantry exercises.—These, as likewise the foregoing, are under the superintendence of Major and Brevet Colonel A. C. M. Pennington, Fourth Artillery, who in his report says:

I was assigned to duties of superintendent of "Practical Military Instruction" by Artillery School General Orders No. 17, September 11, 1885. At this time the command

was engaged in target practice, having been so employed since July 1, and so continued until October 1. Each company had a certain time allotted to it, and Blunt's Manual was followed in scoring, &c. Each battery completed its firing at required ranges and completed its figure of merit for the year. Target practice was resumed May 1, 1886, by General Orders No. 13, April 27, to continue until September 1. Gallery practice commenced January 1, 1886, and continued until February 28, 1886, each battery being so engaged twelve days. This concluded in-door instruction.

Drills were instituted in the "School of the Soldier and Company" December 1, 1885, to December 30, 1885, in each battery. They took place daily, on usual drill days, and embraced all the exercises and movements therein contained.

General Orders No. 4 of 1886 instituted battalion drills every Friday, and they so took place, weather permitting, until May 1, 1886. During the continuance of these drills all the movements and exercises in the "School of the Battalion" were performed repeatedly, and preceded many of the drills the battalion was practiced in passing in review. Dress parade has taken place daily, Saturdays excepted, when weather permitted, and guard mounting every morning. Review and inspection ceremonies were had on the last day of each month.

Recruits on joining have been subjected to the usual instruction in setting up exercises, squad drills, and manual of the piece, before taking their places in the battery in formations under arms.

Theoretical instruction in the section rooms has been given the non-commissioned officers in infantry tactics, an officer being detailed for this duty from headquarters United States Artillery School, weekly reports being rendered by him as to the progress made. For this instruction all the non-commissioned officers of the batteries were formed in classes.

Target practice (infantry).—The range having been put in order, firing commenced on May 1 and continued without interruption until September 1. The following table shows the number of rounds fired by each battery at each range:

Battery.	200.	300.	500.	600.	800.	1,000.	Skir.	Total.
G. First.....	5,095	4,235	4,485	2,600	480	645	1,160	19,700
K. Second.....	6,120	5,125	3,905	2,675	675	565	3,120	21,885
M. Third.....	4,000	3,115	2,525	1,610	195	295	870	12,610
I. Fourth.....	5,330	5,195	4,042	3,950	820	937	4,986	22,260
G. Fifth.....	5,206	3,725	2,985	2,570	435	390	1,260	16,621
Total.....	25,751	21,395	17,592	14,405	2,605	2,882	8,396	92,976

The following table shows the figure of merit at skirmish firing:

Battery.	FIGURE OF MERIT.							
	Number avail- able for prac- tice.	Number firing.	Per cent. fir- ing.	Num ber of shots fired.	Number of hits.			
					Standing figure.	Kneeling figure.	Lying figure.	Total.
G. First.....	32	26	81	520	45	46	15	106
K. Second.....	32	28	87½	560	55	56	14	125
M. Third.....	33	27	81	540	20	31	10	61
I. Fourth.....	30	24	80	499	40	28	12	80
G. Fifth.....	29	23	80	460	38	25	6	69
Total.....	156	128	82	2,560	198	186	57	441

The following table exhibits the number of men classified under the different heads :

Battery.	Third class.	Second class.	First class.	Marksmen.	Sharpshooters.	Present not firing.
G, first	2	4	7	27	5	0
K, second	1	2	3	25	19	1
M, third	4	4	12	22	4	0
I, fourth	0	0	1	28	15	0
G, fifth	4	1	9	25	2	5
Total	11	11	32	127	45	6

And the following exhibits the figure of merit for the present and preceding years :

Battery.	1883.	1884.	1885.	1886.
G, first	19.85	51.17	42.55	57.52
K, second	27.20	47.19	40.10	75.51
M, third	20.47	64.18	50.86	46.98
I, fourth	33.83	45.57	54.09	74.92
G, fifth	26.09	35.00	48.12	49.695
Average	25.488	48.622	47.144	69.25

SCHOOL TERM.

General Orders No. 108, of 1885, from headquarters of the Army, changed the time of exchanging classes from May 1 to September 1 of every alternate year, commencing with the class of 1886.

The primary object of this change was to adjust the time of leaving here with that for the detail of lieutenants to the Military Academy to light batteries and to colleges, thus avoiding expense to the Government and to the lieutenants the inconvenience of an additional move. This change of time gave to the class of 1886 three additional months, enabling the members to review many subjects to advantage.

By resolution of the staff, approved by the Lieutenant-General, the final graduating exercises of each class was fixed for June 20 to 30.

General Orders No. 125, of 1885, from headquarters of the Army, provides for a Board of three officers, to be designated by the Commanding General of the Army, to attend at this period and make report upon the workings of the school.

The Board for this year consisted of Maj. Gen. J. M. Schofield, United States Army; Col. C. L. Best, Fourth Artillery, and Maj. M. P. Miller, Fifth Artillery.

This Board met here on the 22d of June and at once proceeded to the duties assigned it.

A full and complete report from each instructor, showing the extent and method of instruction for his particular branch, was laid before the Board, together with all examination papers, essays, drawings, &c., of the present class. All facilities for instruction, such as the library, ballistic, and other apparatus, surveying and other instruments, were exhibited and explained by members of the class. During the following

three days every department and branch of the school was thoroughly inspected, and on the evening of the 25th the diplomas were delivered, accompanied by the usual exercises.

The following officers received diplomas: First Lieut. George S. Grimes, Second Artillery; First Lieut. Thomas R. Adams, Fifth Artillery; First Lieut. M. M. Macomb, Fourth Artillery; First Lieut. Joseph S. Oyster, First Artillery; First Lieut. John R. Williams, Third Artillery; First Lieut. Albert Todd, First Artillery; First Lieut. Frederick Marsh, First Artillery; First Lieut. Solon F. Massey, Fifth Artillery; Second Lieut. Charles H. Hunter, First Artillery; Second Lieut. Charles A. Bennett, Third Artillery; Second Lieut. Albert C. Blunt, Fifth Artillery; Second Lieut. Ormond M. Lissak, Fourth Artillery; Second Lieut. George F. Barney, Second Artillery; Second Lieut. Adelbert Cronkhite, Fourth Artillery; Second Lieut. William P. Stone, Second Artillery.

First Lieut. A. D. Schenck, Second Artillery, having received a diploma with the class of 1869, did not elect to receive another. He had, however, traversed the entire course of studies with the present class in the most creditable manner. Second Lieut. E. A. Millar, Third Artillery, being absent sick, did not complete the course, and consequently did not receive a diploma. Upon his return from sick-leave, on August 13, he was examined upon the unfinished part of his course, and passing satisfactorily was awarded his diploma. First Lieut. David D. Johnson, Fifth Artillery, having failed to pass a satisfactory examination in law, did not receive a diploma. A re-examination was granted him on the 27th of August, when passing satisfactorily he was awarded a diploma. Second Lieut. Henry De Waite, Fifth Cavalry, not having joined until January 1, 1885, continues with the present class until he has finished the entire course, February 15, 1887.

My report of last year gave an account of the work performed by the foregoing class for that year.

SCHOOL FOR THE ENLISTED MEN.

Instruction for the above has been confined almost exclusively to non-commissioned officers, and has been a continuation of the system so successfully adopted last year. This embraced a course of instruction for all in so much of infantry, field, and heavy artillery tactics, together with the instructions for guards, as is necessary for non-commissioned officers in the performance of their duties. In addition to this some of the most competent were selected to pursue a course of elementary surveying.

Infantry tactics.—This branch was under First Lieut. A. G. Tassin, Twelfth Infantry. The course commenced October 1, 1885, and ended November 14, 1885, and embraced the "School of the soldier, company, and skirmishing," and so much of the battalion as relates to guides, ceremonies, guard-mounting, &c. All non-commissioned officers who had not been over the course during the previous year were required to attend, numbering in all thirty-six.

Artillery.—Upon completion of the foregoing the subject of artillery tactics (field and heavy) and "guard duty" was taken up, the instruction being under First Lieut. A. D. Schenck, Second Artillery, who, in his report, says:

To insure systematic and thorough instruction the course was divided into lessons, and each non-commissioned officer was required to recite upon each and every lesson. This system has been found to work well in many respects, especially in the most im-

portant one of insuring thorough instruction in all cases, so far as it went; but unusually slow progress has obtained in many cases, from cause unforseen in the beginning, chiefly in the case of corporals, resulting from absences caused by the calls for other duties, generally guard duty, &c. Other cases apparently so far behind those in advance are due to the fact of their recent appointment to the grade.

Surveying.—As before stated, a section, consisting of twelve of the best qualified non-commissioned officers, was formed for the purpose of taking a course in elementary surveying. Instruction commenced February 22, and was continued under Second Lieut. C. A. Bennett, Third Artillery, until the 5th of April, when he was relieved by First Lieut. Frederick Marsh, First Artillery, who completed the instruction May 5. In his report Lieutenant Marsh says:

At the time I took charge the theoretical part of the course was completed, and I continued the instruction in the practical use of the simpler surveying instruments. Taking first the azimuth circles, the men were exercised in measuring horizontal angles, by running the boundary lines of a survey, which were afterward plotted to a scale, and the contents computed. They also determined with it the distances to several prominent points in the harbor, solving the triangles trigonometrically and plotting the distances.

In the matter of range-finders the Weldon and Pratt were used, each man being required to determine a sufficient number of distances to enable him to use either instrument readily and with considerable accuracy. Indeed the result of the measurements of known distances were remarkably correct. The theory and use of the surveyor's compass was next taught, and afterward a survey made of an irregular piece of land near the fort. This was also plotted to a scale and the contents computed, the results being excellent. The use of the box-compass and protractor for hasty surveying was only explained theoretically, for lack of proper drawing material.

A great deal of interest was manifested in the course by all under instruction, the men being impressed with the idea that the knowledge gained was of much practical value to them.

In addition to the foregoing the non-commissioned officers received from Captain Ingalls a course of instruction in telephony, which enables them to be of use wherever the telephone is employed.

Signaling.—Instruction in this branch was under Second Lieut. C. A. Bennett, Third Artillery, until relieved from this post, September 1. Since then it has been under First Lieut. C. W. Hobbs, Third Artillery.

Lieutenant Bennett, in his report, says:

There has been instruction in signaling during the following months, viz: November, 1885, April, May, June, July, and August, 1886. Under instruction from Chief Signal Officer, the greater part of the month of December, 1885, was taken up in testing the practicability of using the American Morse code as a service code. In January, February, and March, 1886, there was no signaling pending change in the service code.

All of the officers at present here under instruction of the Artillery School, also most of the non-commissioned officers, received instruction in signaling with the old code in November, 1885. The same officers received instruction in the new code in April, 1886, and the non-commissioned officers have been under instruction from that time to the present.

The method at present employed in instruction of the non-commissioned officers is as follows, viz: The alphabet is divided into four portions, each corresponding to one column of the alphabet on the code card. At least one set of letters are to be learned and practiced each day. These letters are written on slips without regard to order, each letter occurring several times. The class is divided into twos, who signal and receive alternately, with wand, the letters on these slips. After being able to send and receive readily, they receive practical instruction in flag-signaling, being taught how to wave the flag, the conventional signals, &c. Flag-signaling, both in straight messages and in cipher, is kept up until the men can signal rapidly and accurately.

It will be seen from the foregoing that the interests of the enlisted men have not been neglected. Nothing was attempted in the way of primary education, reading, writing, arithmetic, &c., for the reason that the necessary time could not be abstracted from the many other duties of the post and school.

MUSEUM.

This consists of a collection of arms, projectiles, fuzes, models, explosives, &c., intended more for the purpose of instruction than for mere exhibition, illustrating the steps of progress in the military art.

Among the things of most interest may be mentioned a Gribeauval field carriage with its bronze piece, an eighteen pounder, which came into the possession of the United States from the British at the capitulation of Saratoga, October 17, 1777. This carriage marks the first important steps made in the construction of gun-carriages. It is the carriage that carried the Americans through the French and Indian war, the war of Independence, and the war of 1812-'15. It was superseded by the stock-trail system, which carried us through the Mexican war and the War of the rebellion. This last system is now giving way to carriages of iron and steel, specimens of which are at this post. The military student has thus before him three systems marking the most important epochs in artillery.

Another piece of interest is a small breech-loading bronze cannon captured by Admiral Rodgers, U. S. Navy, from the Coreans in 1871. The inscription on this piece has been recently translated at the Chinese embassy at Washington, and gives the date of 1312. The workmanship of this piece shows that the art of gun construction was not, even then, in its infancy, and affords valuable hints as to the use of artillery by the Asiatics long prior to its use by the Europeans.

It is highly desirable that the collection of small arms should embrace specimens of those with which foreign services are armed. To this end application was made for specimens of such, but it is to be regretted the application was not favorably considered by the Ordnance Department.

PUBLICATIONS.

This branch is under First Lient. C. P. Miller, Fourth Artillery, adjutant and secretary of the school. In his report Lieutenant Miller says:

I took charge of the printing and lithographic office and book-bindery of the Artillery School, December 9, 1885, since which time the following work has been done:

PRINTING-OFFICE.

Title of book.	Author.	Size of edition.	Purpose.	No. of pages.	No. of impressions.
		<i>Vols.</i>			
Exterior Ballistics	Captain Ingalls.....	320	Use at school.	139	11,200
Breech-loading Field-Piece	Lieutenant Schenck ..	125	do	6	250
Roster of the Post.....	Adjutant	200	do	3	200
Essay	Lieutenant Macomb ..	400	Distribution ..	17	2,300
Military Art and Science.....	Captain Calef.....	320	Use at school.	250	20,100
Essay	Lieutenant Lemly	400	Distribution ..	20	2,400
Do	Lieutenant Massey ..	400	do	18	2,200
Practical Problems.....	Lieutenant Wisser.....	320	Use at school.	130	9,750
Distribution of Ords.....	Lieutenant Vogdes ..	500	Distribution ..	14	3,000
Essay	Lieutenant Bennett ..	500	do	19	1,800
Do	Lieutenant Schenck ..	500	do	19	2,500
Do	do	500	do	27	3,500
High Explosives	Lieutenant Macomb ..	500	do	17	2,500
Job Work				65,833	65,833
Total					127,333

BOOK-BINDERY.

Title of book.	Author.	No. of volumes.
Exterior Ballistics	Captain Ingalls	320
Essay	Lieutenant Macomb ..	400
Roster of Post of Fort Monroe		200
Geology	Lieutenant Vogdes ..	70
Essay	Lieutenant Massey ..	400
Do.	Lieutenant Lemly ..	400
Military Art and Science	Captain Calef	320
Breech-Loading Field-Piece	Lieutenant Schenck ..	125
Practical Problems	Lieutenant Wisser ..	300
Distribution of Iron Ores	Lieutenant Vogdes ..	500
Essay	Lieutenant Bennett ..	500
Do.	Lieutenant Schenck ..	500
Do.	do	500
High Explosives	Lieutenant Macomb ..	500
General Orders and books for library		295
Pads, boxes, &c.		1, 675
Total		7, 005

LITHOGRAPHING.

Lithographing plates for text-books and miscellaneous work, 10,515.

Present facilities.—One Universal half-medium press, one hand lithographic press, five lithographic stones, one Gem paper-cutter, one Sanborn's table shears, one Sanborn's standing press, one Thompson's hand-wire stitching machine, for stitching three-sixteenths of an inch; type, stands for same, and a good supply of paper, binding material, &c.

In the lithographic work the photographic department is found of great assistance in making the wet plates, blue prints of maps, &c. It is often difficult to get good printers, lithographers, and book-binders, but those that we now have take an interest and pride in their work, and give entire satisfaction.

The records of the school and post are annually becoming more voluminous. A careful examination of all the old records has been made by First Lieut. John R. Williams, Third Artillery, and Lieut. Charles H. Hunter, First Artillery, and memoranda made from them of all matters of interest that it may be necessary to refer to. From these records Lieutenant Williams is now compiling a history of the post.

LIBRARY.

There are two libraries at this post, the artillery school library and the post library. The first contains books principally of a scientific and professional nature, and is of great value to the student for reference. It contains about 5,000 volumes, and is being added to as our means will permit.

An analytical catalogue, commenced by Captain Chester, Third Artillery, has been completed by Lieutenant Todd, First Artillery, and is now in the hands of the printer. Much credit is due to those officers, as it has been a work of great labor.

The building is comfortable, but being of wood is very insecure in case of fire. Estimates have been made for fire-proof building, but no action taken by Congress.

The post library is used almost exclusively by the enlisted men, and contains 3,500 volumes of books, chiefly histories, travels, and fiction, daily papers and magazines. This is a comfortable building and is much resorted to by the enlisted men.

CLASS OF 1888.

On the first of the present month (September) the class of officer students, hereinbefore mentioned was relieved from duty at the artillery school by the following new detail: First Lieuts. H. W. Hubbell and

T. C. Patterson, and Second Lieuts. C. J. Bailey and Samuel Rodman, jr., First Artillery; First Lieuts. E. M. Weaver, jr., and E. E. Gayle, and Second Lieuts. W. Walke and H. L. Hawthorne, Second Artillery; First Lieuts. C. W. Hobbs and H. H. Ludlow, and Second Lieuts. B. W. Dunn and I. A. Haynes, Third Artillery; First Lieuts. L. H. Walker and T. C. Davenport, and Second Lieuts. S. M. Foote and J. C. W. Brooks, Fourth Artillery; First Lieuts. John McClellan and O. E. Wood, and Second Lieuts. C. G. Treat and W. F. Hancock, Fifth Artillery.

On the 10th this class commenced instruction in the department of engineering under Capt J. M. Ingalls, First Artillery. This department consists of the following courses:

- I. Military surveying and topography.
- II. Military bridges.
- III. Roads and railroads.
- IV. Submarine mines.
- V. Field fortifications.
- VI. The application of the foregoing to the practical solution of problems involving the reconnaissance, attack, and defense of strategic points and places.

Captain Ingalls in his report says:

This department is well provided with the necessary instruments and material for the purposes of instruction, and for individual practice, such as plane tables, theodolites, surveyor's compasses, solar compasses, transits, levels, sextants, azimuth circles, drawing instruments, &c., all of which are in good repair. There has recently been added to the instrumental outfit a very superior omnimeter, made by Elliott, London, and which promises to be a very useful instrument.

The method of instruction is substantially the same as that hitherto pursued in this Department. For example, in the course of military surveying, in which the class is now engaged, the student is assigned an instrument which he studies, aided by the text book, until its theory and adjustments are mastered. He then reports to the instructor, who examines him and marks him according to his merit. He is then set an exercise with the instrument in practical surveying, soldier assistants being provided. Having made the survey and plotted it to a prescribed scale, he submits it to the instructor, who examines him on the methods employed, judges of the accuracy and excellence of his work, and marks him accordingly. He is then assigned another instrument and proceeds as before.

Analagous methods of instruction will be pursued in the other courses, the object being to throw the student as much as possible upon his own resources in solving problems similar to those which are likely to be presented to him during a campaign, and to afford him such assistance out of his difficulties as may be necessary.

The start made with the last two classes in the solution of problems involving the attack and defense of points of strategic importance gives encouragement for a greater development of this class of exercises. In furtherance of this it is proposed to select a number of localities and, assuming certain conditions, send the officer students out in pairs to the various places to make the necessary reconnaissance, maps, and plans for defensive lines, together with a full written discussion of every offensive and defensive feature. The problems will be of this nature: Assumption, an enemy's fleet with 5,000 troops on board has entered Chesapeake Bay. The entrance to Hampton Roads is effectually closed against him. It is possible that he intends to land in Lynn Haven Bay and make a dash at Norfolk and the navy-yard. There are 2,000 men and two field batteries at Fort Monroe, and 500 militia infantry at Norfolk available for immediate defense. Required, first, a reconnaissance map and description of the roads by which the enemy might advance for the purpose assumed; second, a detailed reconnaissance map and description of every position on these roads where the enemy could be effectually opposed and the number of men required to occupy each position; third, plans and profiles of the necessary field works, with

their armaments and garrisons, and explanation of their purposes; fourth, working plans and specifications of such bridges and roads as are required to facilitate the defense, with notes upon the material available, and an estimate of the number of men and length of time required for their construction.

Problems of this kind are thoroughly practical, and it is believed that this kind of work will result in more good to the service for the time and money expended than any other species of instruction.

The Board heretofore mentioned, of which General Schofield was president, recommended that instruction in submarine mining should be given. This emboldens me to try to revive what was attempted several years ago, but which was only partially successful, owing to the impossibility of obtaining the necessary appliances for carrying out this very necessary part of an artillery officer's education. Submarine mines operate as a means of harbor defense only in co-operation with artillery. Officers of the latter branch of service should necessarily know the nature, extent, and ability of the co-operating force. If submarine mines are to play the important part expected of them in the defense of our coast, then the more persons who can be instructed in their service the better; and manifestly those who are to be so intimately connected with them—the artillery is the place to start.

The engineering course closes on the 15th of February next, and will be succeeded by that in artillery.

The forenoon of each day—Saturdays and Sundays excepted—is devoted to theoretical instruction, while the afternoon is given to the more practical military exercises. At present all the officers that can be employed at artillery exercises are so employed, while others are engaged at cordage or in signaling.

No improvement whatever has been made since my last report in the artillery of the post; none but obsolete patterns of guns and mortars are as yet available for instruction. The habits acquired in handling these pieces will, however, be highly useful when more modern cannon come into our service.

Several wooden platforms for 15-inch guns were received from the Engineer Department, and two of them have been, with considerable labor, laid, and 8-inch converted rifles, with improved carriages, mounted thereon. The site selected for these platforms is outside of the fort, adjacent to the east end of the water battery. This position admits of the erection of the necessary screens for taking velocities and making other observations in ballistics.

GENERAL REMARKS.

Major and Brevet Colonel R. Lodor, Third Artillery, who for several years had been on duty at the school as a member of the staff, having been transferred from the post on July 1, was succeeded by Major and Brevet Colonel R. T. Frank, First Artillery. Major Frank has been designated as superintendent of instruction in the departments of engineering, law, and military science.

First Lieut. T. H. Bliss, First Artillery, was relieved from duty as adjutant of the post and secretary of the artillery-school staff for the purpose of assisting in the organization and development of the Naval War College. He was succeeded in his duties here by First Lieut. C. P. Miller, Fourth Artillery. In other respects the organization of the school remains the same as at the date of my last report.

No change has taken place in the course of instruction other than slow but sure development to a higher plane.

When the school was first established in 1868 the course, for many reasons, was only of the most elementary type. This so continued until 1876, when the term was extended from one to two years. This additional time admitted of more thoroughness in each branch. Many things were dropped out as being too elementary and others adopted in their place. At about the same time, and each year since, Congress has granted a small appropriation, which, being judiciously administered, has provided the school with many machines, instruments, books, and other appliances essential to more advanced instruction. The school, springing from nothing, was, at the start, without experienced instructors. This has gradually corrected itself.

The primary object of the school is not merely to educate lieutenants to be lieutenants, but to prepare them for the responsible duties of higher positions and commands, especially in the field during war. The course of studies is, therefore, laid out to this end, and may fairly be considered as post graduate to the Military Academy.

The method of imparting instruction necessarily varies with the nature of the subject, but as far as possible the student is thrown upon his own resources of investigation and study, and is restricted as little as possible to text-book recitations. With the ambitious and zealous this works well; with laggards who require the stimulus of every-day spurring the system is not so good. The number of students does not admit of a division of them to suit both cases.

Congress at its last session granted the usual appropriation of \$5,000 for the school for the fiscal year ending June 30, 1887.

Inclosed herewith as appendices, A to L, are the reports of instructors, &c.*

Very respectfully your obedient servant,

JOHN C. TIDBALL,

Colonel First Artillery,

Bvt. Brig. Gen., U. S. A., Commanding.

The ADJUTANT-GENERAL, U. S. A.,

Washington, D. C.

REPORT OF COLONEL McCOOK.

HEADQUARTERS INFANTRY AND CAVALRY SCHOOL,

Fort Leavenworth, Kansas., August 29, 1886.

GENERAL: I have the honor to submit the report of the United States Infantry and Cavalry School at this post for the academic year ending June 30, 1886. Assuming command of the post and school May 13, near the end of the second session of the first year's course, the instruction to the close of the examination progressed in the same order and conditions existing previous to my taking command.

The standing of the student officers having been determined by the school staff, Orders No. 15, July 3, were published, announcing the same. Copy herewith appended.*

At the close of the June examination student officers desiring a leave of absence made applications, which were recommended for thirty days. Early in August the class, with few exceptions, returned for duty.

* Omitted.

A course of practical engineering was marked out, the officers making gabions and fascines, with all kinds of revetments known to modern engineering. A small field-work is now being thrown up, the officers making the profile and placing the material constructed on the interior slope. Timber was cut and prepared for stockades and palisades; also the different kind of entanglements known to modern warfare were placed in front of the work. This is a commencement in practical military engineering.

Early in July a circular letter was addressed to the field officers, captains commanding companies, troops, and battery composing the command; also, to the secretary and topographical officers of the school, calling upon them to submit in writing such suggestions, recommendations, or remarks, based upon their experience, that would assist the commandant to a better comprehension of the necessities of the school for its progress and management.

These papers were submitted by July 20. The next day the school staff was called together, when the views of the commandant were expressed to them in regard to some changes in the course of studies for the coming year. (Inclosures 1 to 11 inclusive.)*

It was recommended that the greater part of the prescribed law course be eliminated, and the more useful and practical studies substituted: viz, the tactics of the three arms (not in the course for the present class). The veterinary art also omitted.

The tactics of the three arms will be thoroughly taught. An extended course in the veterinary art will be taught to the cavalry and artillery officers. A limited course in this subject to the officers of infantry, yet sufficient for them to detect from symptoms all diseases incident to horses and mules, with a knowledge of the remedies, their use, and application for the same.

Hereafter the working days of the week, from Monday to Friday inclusive, will be devoted to the theoretical and practical instruction of the course of studies laid down for the coming year. Each Saturday of the term, from 9 to 12 o'clock a. m., will be devoted to instruction in the practical administration of the company, regiment, and post, the quartermaster's and commissary departments, from the making of requisitions to the closing of accounts with the Treasury Department. All subaltern officers present at the post to attend this instruction.

Attention is respectfully called to the fact that, besides the field officers on duty at the school, the instructors are necessarily selected from the officers on duty with the companies composing the garrison, and on account of insufficient quarters for other officers the commandant of the school is limited to his selection to those officers, some of whom, by physical disability and want of proper knowledge, are not competent to teach any subject. Hence he does not deem it proper to ask for the intelligent, bright, and progressive officers of our Army to be placed on duty as his assistants, there not being sufficient quarters at the post to make them and their families comfortable.

The following recommendations are submitted for the approval of the Lieutenant-General of the Army:

That the candidates for the next year's class, and ever hereafter, be selected by the colonels of regiments one year in advance of the date of entering the school; that each candidate shall have an alternate, nominated at the same time and by the same authority, to take the place of the candidate should accidents of service prevent his reporting at the school or in case of his failure to enter.

* Omitted.

No candidate or alternate selected shall be over thirty-five years of age, unless he be a most zealous officer and ambitious to master the course at the school. All candidates and alternates to have served two years with their regiments; also to possess physical health sufficient to perform active field service.

Candidates presenting diplomas from West Point, or any institution of merit, to be admitted without examination. Candidates reporting and not possessing such diploma will be examined by the school staff to ascertain if they possess sufficient knowledge of the following subjects to insure their progress at the school, namely: General history and history of the United States; geography, arithmetic and algebra, to include theory of logarithms and geometry.

The latter candidates, having had a year's notice for preparation, and failing to pass the examination for admission, will be without excuse, and should at once be returned to their regiments, and the alternates substituted for them.

That student-officers be not attached to companies for any duty but roll-call, and that they perform only such military duties as may from time to time be directed by the commandant of the school.

That the companies stationed at the post of Fort Leavenworth be models in their respective arms in administration, drill, and discipline, and that they may be complete organizations, all officers belonging thereto should be present, performing all the duties of the post prescribed by regulations and the commandant of the school.

Student-officers should not be called upon to perform any duties liable to deflect their minds from the regular studies or from the subject for which this school was established.

The student-officers should compose one class, study the same theoretical and practical course, thereby permitting each individual officer to strive for the highest standard of excellence attainable at the school.

That the present manner of indicating class standing be changed.

That the class be divided in groups, composed of six members.

That the six most meritorious members of the class compose the first group, but are not to be classified in the group.

That the next six most meritorious students compose the second group, but not classified, and so on to the end. The advantages of this system to the Army admits of easy explanation. Upon graduation names of the members composing the first group to be forwarded to the Adjutant-General of the Army, the staff and commandant recommending them for preferment—foreign details, &c.

That, if during any period of the course a student-officer becomes neglectful of his studies, failing to pass the stated examinations, he should, upon the recommendation of the staff and commandant of the school, be returned to his regiment with a proper reprimand from the Lieutenant-General, to be published to the Army in general orders.

I would most earnestly recommend that quarters be erected at this post to accommodate the officers and men of one company of engineer troops of our Army. Modern military engineering, in all the details pertaining to it, should be thoroughly taught at this school. There should be model field-works erected upon different points of this military reservation. There should be a few ponton boats, enough chess-boards and barks with lashings to build a few bays of a bridge. There is still water near at hand for this exercise. There should also be scaled models of modern military fronts, laid in brick and cement, for practical study by the officers of the school. In addition there should be models here of all temporary wooden bridges used in war. We do not lack en-

gineering ability in the line of the Army, but with the engineering company comes the skilled labor, not to be found in the average company of infantry and cavalry. The officers of this company, devoting themselves especially to engineering, will prove competent instructors in theory and practical work in the field.

I deem the coming of this company of prime necessity. There is no other point in our country where it could render such valuable service.

The month of September will be devoted to instruction in military reconnaissance on foot and horseback.

Practical instruction in outpost duty, advanced guards, escort to convoys, and rear-guards.

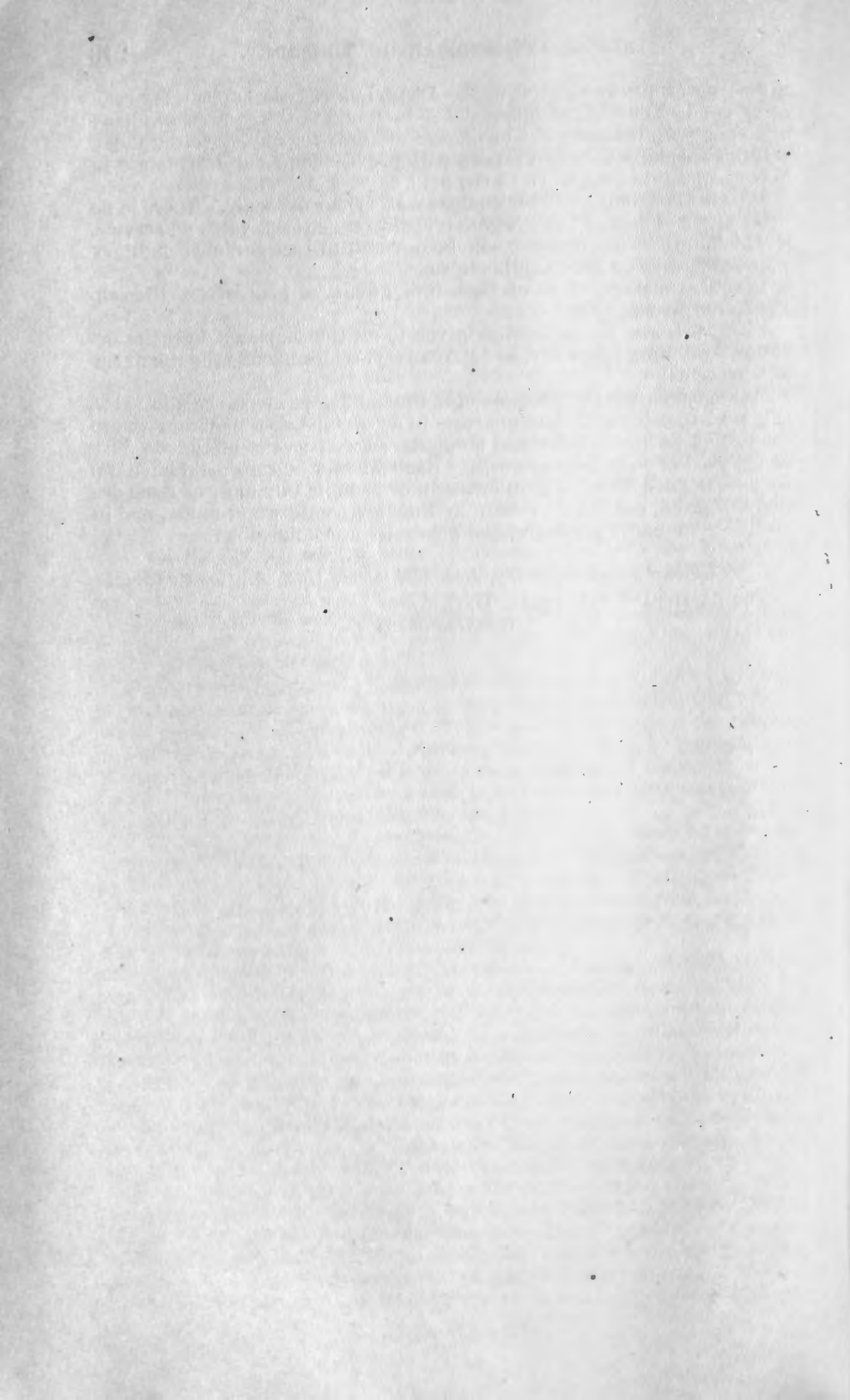
There will also be instruction given to all the command in castramentation—pitching tents of the different styles—to include the use of the shelter tent.

It is most earnestly recommended that sufficient money be allotted to this post to erect sufficient quarters to accommodate the officers sent to the school as instructors and students, as well as the officers on duty at the post of Fort Leavenworth. Each student-officer should have two rooms assigned him. The quarters now occupied by most of them are badly lighted, too dark in the day-time for comfort and study, and in addition are badly arranged and generally uncomfortable.

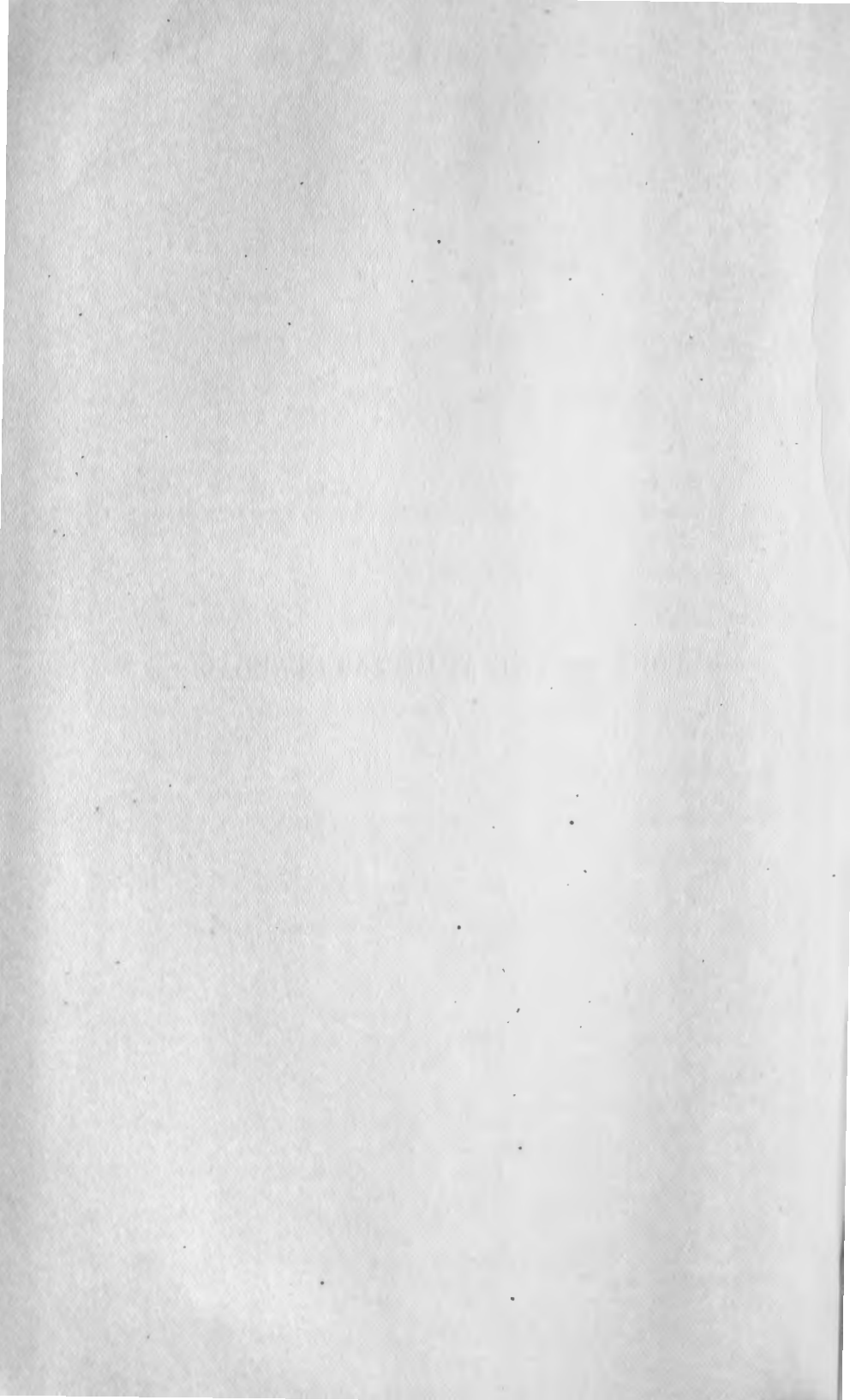
A. MC. D. MCCOOK,

Colonel Sixth Infantry, Bvt. Maj. Gen., U. S. A., Commanding.

The ADJUTANT-GENERAL, U. S. A.,
Washington, D. C.



REPORT OF THE ADJUTANT-GENERAL.



ANNUAL REPORT

OF

THE ADJUTANT-GENERAL.

WAR DEPARTMENT,
ADJUTANT-GENERAL'S OFFICE,
Washington, October 9, 1886.

SIR: I have the honor to submit my annual report for the year ending September 30, 1886.

MILITIA.

In accordance with requests of State authorities, officers of the Army were detailed during the past summer and fall to inspect militia encampments at the following points:

Alabama.—At Mobile and Selma, by Capt. R. G. Howell, Second United States Artillery.

Connecticut.—At Niantic, by First Lieut. C. A. L. Totten, Fourth United States Artillery.

Dakota.—At Aberdeen, by Lieut. Col. E. F. Townsend, Eleventh United States Infantry.

Illinois.—At Springfield, by Capt. G. Lawson, Twenty-fifth United States Infantry.

Indiana.—At La Fayette, by Maj. R. Lodor, Third United States Artillery.

Iowa.—At Oskaloosa and Marshalltown, by Col. R. I. Dodge, Eleventh United States Infantry.

Kansas.—At Fort Riley reservation, by Lieut. Col. C. E. Compton, Fifth United States Cavalry.

Kentucky.—At Crab Orchard Springs, by Capt. J. L. Tiernon, Third United States Artillery.

Maine.—At Bangor, by Capt. E. Field, Fourth United States Artillery.

Massachusetts.—At South Framingham, Hingham, and Essex, by Capt. G. B. Rodney, Fourth United States Artillery.

Michigan.—At Island Lake, by Maj. A. C. M. Pennington, Fourth United States Artillery.

Minnesota.—At New Ulm and at White Bear Lake, by Maj. J. M. Bacon, Seventh United States Cavalry.

Missouri.—At Sweet Springs, by Capt. T. Schwan, Eleventh United States Infantry.

New Hampshire.—At Concord, by Lieut. Col. H. W. Olosson, Fifth United States Artillery.

New York.—At Peekskill, by Maj. R. H. Jackson, Fifth United States Artillery.

Ohio.—At Washington Court-House, Springfield, Mount Vernon, and Sandusky, by First Lieut. A. P. Blocksom, Sixth United States Cavalry.

Pennsylvania.—At the various regimental encampments, by Maj. W. J. Volkmar, assistant adjutant-general.

Rhode Island.—At the State Camp Ground, by Col. C. L. Best, Fourth United States Artillery.

Vermont.—At Burlington, by First Lieut. W. H. Coffin, Fifth United States Artillery.

The reports, submitted herewith, of the several officers designated by the War Department to inspect the encampments of State troops are highly interesting and worthy of careful consideration. While just but kind criticism points out many defects (none that cannot be remedied by men exhibiting the military zeal and pride that animate the State militias), the reports unmistakably evidence a slowly maturing temper and character destined to still more closely unite the Regular Army and the militia, the twin parts of the defensive power of the Government.

A careful perusal of these reports leads me to make the following general remarks:

State encampments, to be of absolute benefit, should at least be of ten days' duration, and, while established at convenient points looking to economy in the concentration of the troops, should be at a sufficient distance from the homes of the members of the command in order to overcome business and social influences, which seriously affect efforts at imparting instruction and holding the men in hand for drills, target practice, guard duty, &c. Camps should be divested of every appearance of holiday character.

The programme of military exercises should exclude elementary company drills, and the time of the encampment devoted to instruction and practice in skirmish and battalion drills and guard duty. As most of the fighting in the future must be done in open order, a thorough acquaintance with the skirmish drill is of the highest importance.

Officers should be required to recite upon the duties of guards and sentinels, and instruction in guard duty be given to the men in the armories.

So far as fatigue uniform or dress for field service is concerned, it would be of advantage for the authorities of each State to prescribe a simple, plain, but serviceable fatigue uniform for all its troops to which companies might gradually conform within a limited time, say one year. This is not intended to interfere with the right of each command to wear such full-dress uniform as it may have selected for wear on reviews, parades, and other occasions of pure ceremony.

Obsolete arms and ammunition in the hands of State troops should be replaced by improved guns of same pattern as in the hands of the Regular Army, and suitable ammunition provided. On this subject I beg to renew the recommendation made in my last report.

Exhibition drills, while interesting as showing to what degree of mechanical precision a body of men can be trained to attain in movements and motions, are an undesirable feature of military camps. In many instances the development of extreme smartness in drill involves the neglect of some of the most important and solid parts of a soldier's training.

The report on the target practice at the Maine encampment is most creditable to the troops participating, and demonstrates what results can be obtained from careful instruction and practical discipline in this important exercise. The great want is a thorough, systematic course of instruction prescribed from State headquarters and rigidly insisted

on, and the establishment in each State of an examining board, before whom ignorant and incompetent officers could be brought with a view to their elimination from the military service of the State. Every officer elected should, before appointment, be subject to examination by a board of officers, of which, if possible, the regimental and brigade commanders and the inspector-general should be members. The material composing the militia of the several States is generally excellent, and zeal and intelligence the rule; but the former must be wisely directed and the latter systematically cultivated.

MILITARY COLLEGES.

The tables submitted exhibit the apportionment of details corrected to October 1, 1886, and a synopsis of the data contained in the reports of the several officers performing the duties of professor of tactics and military science.

These reports show a steadily growing interest in military instruction, as evidenced by the increased percentage of students attending drills, &c., and the degree of appreciation of the value of the system on the part of the college authorities. The aptitude of American youths for military exercises is undoubtedly good, and, when supplemented by the frank and full recognition on the part of the several faculties that military training (beyond the enforced physical exercise it gives) is of positive service to the student in the ordinary avocations of civil life, will realize all the practical advantages resulting from a course of instruction enforcing manliness of character and deportment.

To reap, however, the full benefits of the law authorizing the detail of officers of the Army as military instructors, it is imperative that the professor of tactics and military science be a recognized member of the faculty of the institution at which on duty, with equal vote, and that military instruction be given a co-ordinate position with the other departments of study.

REGULATIONS OF THE ARMY.

The amendments and changes in the Regulations rendered necessary to make the latter conform strictly with existing laws have become so numerous that a new edition is an imperative need and is earnestly recommended.

DISCHARGES.

The increasing frequency of applications for discharge from the Army makes the adoption of measures that will protect the Government from loss a wise provision. I beg, therefore, to recommend that the attention of Congress be called to the need of legislative action making all discharges by favor conditional on the reimbursement to the Government of the expense of recruiting and transportation, or a fixed sum, say \$100, except in cases where long and faithful service on the part of the man constitutes a controlling element of favorable consideration.

RETIREMENT OF VETERAN SOLDIERS.

The law of February 14, 1885, authorizes the retirement from service of old and faithful soldiers on the completion of thirty years' military service. With the view to facilitate the preparation of estimates and simplify the present cumbrous mode of payment, I beg to urge the

adoption of the scheme submitted in my last report, grouping the several grades into thirteen classes and fixing a gross sum as the total monthly pay of each class, payments to be made by the Pay Department.

Four deaths occurred during the past year, and four applications for retirement are now pending.

THE MILITARY PRISON.

The Military Prison at Fort Leavenworth, Kansas, has been maintained during the past year, and its business operations have not materially differed from those of the previous year. Scarcely any progress has been made in bringing its capacity to the point required to afford accommodations and profitable employment for all the military prisoners who should properly be sent there. The estimates for money necessary to maintain and improve the prison were prepared with extraordinary care and exactness, and with a detail of statements seldom found in such papers, and it is greatly regretted that the appropriations fell below the amount indicated, as they of necessity limited the operations to the existing capacity, and forbade necessary expansion. Another consequence has been the detention of prisoners at posts in the several military departments until they could, by the occurrence of vacancies at the prison, be transferred there in small detachments. In my last report I had to report the fact that transfers to the prison were temporarily suspended owing to the exhaustion of the reduced appropriation for subsistence, and I am now obliged to report the insufficiency of the appropriation for payment of the small donations to prisoners on discharge, and cannot too much regret the limitation of operations for the public interest, the more so that such operations are for the remedying an evil seriously affecting an important branch of the public service.

The impression seems to prevail to some extent among those who have not had an opportunity to observe the influence of the prison that the punishment is not sufficiently rigid, and that the care and comfort of the prisoners are made too prominent to secure good results in an exemplary way. It is not my purpose to discuss the question of value to be given to the recognized methods of prison discipline as now applied under the influence of the more humane views of the present day, but the persistent efforts made by the prisoners to obtain release is evidence that the experience they are required to undergo is not regarded by them as a lenient condition. During the past year six hundred and thirty applications for clemency have been received, three-fourths of which were made by the prisoners through the regular military channels, and the remainder through or by friends who have sought what they believed the best and strongest influence to secure favor.

The prisoners have all been usefully employed, and the results of their labor will be found stated in detail in the accompanying report of the commandant of the prison.

The money value of the work performed by prisoners in the manufactures is \$39,835.30, which is within \$500 of one-half of all the expenses of the prison for the year. The value of skilled labor is rated at 50 cents per day, and that of ordinary labor at 35 cents. The number of days reported by the commandant is 90,460 of the former and 82,107 of the latter, the value of which, \$73,967.45, is within not quite \$6,000 of the entire expenses of the prison. There seems to be no reason to doubt that as soon as the expense of extension and building shall cease the prison will be practically self-supporting. If the estimates which

have been made for the next fiscal year be approved and full appropriation made, that much-desired state of self-support will, in all probability, be reached by the beginning of the succeeding year.

The inspections of the prison required by law have been regularly made. It gives me pleasure to state the commandant maintains the high character for active efficiency earned by him during his past administration of the affairs of the prison.

GOVERNMENT HOSPITAL FOR THE INSANE.

The following is a list of persons committed to the Government Hospital for the Insane under the orders of the honorable the Secretary of War during the year ending September 30, 1886:

Officer of the United States Army	1
Enlisted men of the United States Army.....	31
Late soldier of the United States Army	1
Late volunteer soldiers	2
Hospital matron.....	1
Military prisoners.....	7
Total.....	43

WORKING OF THE OFFICE.

The clerical and other force of this office remains the same as at the date of my last report.

The following table exhibits the work of the Enlisted Volunteer Pension Branch and other divisions of the office engaged in the preparation of reports on claims for pension, bounty, homestead grants, &c.:

Statement of calls from the Commissioner of Pensions, Second Auditor, &c., for full or partial histories of officers and men of the late volunteer forces, in connection with claims for pension, bounty, back pay, subsistence, land claims, lost horses, &c.

	On hand Octo- ber 1, 1886.	Received during the year.	Total.	Finished during the year.	On hand Octo- ber 1, 1886.
<i>Commissioner of Pensions.</i>					
Enlisted Volunteer Pension Branch	19,926	117,682	137,608	93,701	43,907
Colored Troops Division	1,520	6,554	8,074	5,010	3,064
Volunteer Service Branch.....	703	15,799	16,502	15,512	990
Total.....	22,149	140,035	162,184	114,223	47,961
<i>Second Auditor.</i>					
Enlisted Volunteer Pension Branch	1,807	33,916	35,723	30,890	4,833
Colored Troops Division	576	2,934	3,510	3,168	342
Volunteer Service Branch.....	647	4,728	5,375	3,850	1,525
Total.....	3,030	41,578	44,608	37,908	6,700
<i>Third Auditor.</i>					
Volunteer Service Branch.....	23	541	564	506	58
<i>General Land Office.</i>					
Enlisted Volunteer Pension Branch	635	1,516	2,151	1,448	703
Colored Troops Division		23	23	23	
Total.....	635	1,539	2,174	1,471	703

Statement of calls from the Commissioner of Pensions, Second Auditor, &c.—Continued.

	On hand October 1, 1885.	Received during the year.	Total.	Finished during the year.	On hand October 1, 1886.
<i>Subsistence Department.</i>					
Enlisted Volunteer Pension Branch.....	365	1,527	1,892	1,368	524
Colored Troops Division	2	55	57	57	.....
Total.....	367	1,582	1,949	1,425	524
<i>Pay Department.</i>					
Colored Troops Division		964	964	964	.....

RECAPITULATION.

Number of calls from all sources:				
On hand October 1, 1885			26,204	
Received during the year			186,239	
Finished during the year				212,443
Remaining on hand October 1, 1886.....				156,497
				55,946

Of the number reported on hand, 6,826 are completed so far as the records of this office are concerned, but have not yet been returned from the Surgeon-General's Office, to which they were referred for supplemental report.

The above exhibit shows gratifying results. While the calls received from all sources during the year are 25,238 in excess of the number received during the preceding year, the increase of 13,590 reports over the number completed during the year 1884-'85 demonstrates commendable activity and zeal on the part of the force employed in this important work.

The labor of preparing briefs for action on applications for remuster under the provisions of the act of June 3, 1884, has progressed as satisfactorily as could reasonably be expected from the number of clerks employed, which number is limited only by the available desk room in the Volunteer Service Division, and my inability, with present accommodations, to provide additional working space that necessarily should be within convenient reach of the records that must be examined in the preparation of reports. Of this class of claims 10,852 were on hand October 1, 1885, 5,308 have been received during the year, and final action taken on 1,975 cases, leaving 14,185 claims awaiting investigation and action.

At the close of the late war there were at large 230,000 men against whose names on the rolls the charge of desertion had been entered. It would be a liberal estimate to assume that the cases of 100,000 of these men had been acted upon *prior* to the passage July 5, 1884, of the law providing for the removal of the charge of desertion, thus leaving 130,000 cases to be presented for action. Up to October 1, 1886, 47,354 applications have been received, and of this number 35,000 were rejected as not coming within the provisions of the law of July 5, 1884, or of the supplementary act passed May 17, 1886; in 5,765 cases the charge was removed, and 1,989 applications were denied as not warranting favorable action. There remains now on hand 4,600 claims, of which 2,460 are simple applications for removal of the charge of deser-

tion, and 2,140 are pension cases in which desertion is charged against the claimants in former reports of their military status.

It will be seen from the above statement that there still remain about 83,000 men charged with desertion who have not yet made application for the removal of the charge, but it is fair to presume that nearly all will do so. The fact must also be recognized that the rejected cases *are never closed*, but are liable to be called up for reconsideration on appeals submitting additional testimony, which must be examined to determine its value or relevancy.

The work of investigating each case and preparing a brief of facts for action involves patient and careful examination of numerous records—muster-rolls, company and regimental books, hospital records, &c., and demands thorough acquaintance with the minutiae of military papers, clear judgment, and untiring industry.

The preparation of briefs in pending cases will be pushed as rapidly as the necessarily limited clerical force (in view of other pressing demands) I have been able to assign to this work will permit.

The great increase of calls from the Pension Bureau, as stated in this report, and the rapid accumulation of applications for remuster and for the removal of the charge of desertion, coupled with the fact that, recognizing the importance of prompt rendition of reports in pension and kindred cases, I have kept the other divisions of the office with a barely sufficient force to transact current business of the Army, leaves me no other alternative but to urge that Congress be asked to authorize the employment of twenty-five additional clerks to enable me to meet, with some success, the increased volume of business devolving on my office.

I have felt it my imperative duty in former reports to call attention to the important question of preservation of the official records (muster-rolls) from which reports are made to the Pension Office and other bureaus of the Government in pending claims of various kinds. The deplorable condition of many of these rolls, from causes which I have heretofore set forth at length, is steadily growing worse, and their absolute destruction is only prevented by the exceeding great care exercised in handling them. To secure to the Government the important information they contain, I beg to recommend the employment, outside of office hours, of a number of my best clerks for the purpose of copying the most dilapidated rolls, and that an appropriation be asked of Congress to compensate the clerks engaged in this extra work, of necessity to be done at night, at a rate computed on the basis of their current salary and the number of hours in which so employed.

In closing this report it gives me sincere pleasure to bear testimony to the general intelligence, zeal, and efficiency of my clerks.

Respectfully submitted.

R. C. DRUM,
Adjutant-General.

HON. WILLIAM C. ENDICOTT,
Secretary of War.

MILITIA REPORTS.

MOUNT VERNON BARRACKS, ALABAMA, June 30, 1886.

Report of an inspection of the First Regiment Alabama State Troops in its camp (Camp Seay), near Mobile, Ala.

Pursuant to Order No. 73, Mount Vernon Barracks, Ala., dated the 15th June, 1886, I proceeded to Mobile, Ala., and arrived at the camp of the above-mentioned troops on the morning of the 16th instant. On the 18th instant Special Orders No. 136, Headquarters of the Army, current series, in company with a letter of instructions from the Adjutant-General of the Army, dated the 14th June, was received.

Upon my arrival I found six companies of the regiment in camp, where they had been since the 14th instant. On the 17th one other company arrived, making a total of seven companies, all of whom remained until the end of the encampment. The companies present constituted the entire strength of the regiment, with the exception of one company, which, I was informed by the colonel, was not uniformed, and consequently, as yet, had not been accepted by the State. The total strength present was, on the 18th, one colonel, one major, one adjutant, one quartermaster, one surgeon, one assistant surgeon, one hospital steward, one quartermaster's sergeant, one sergeant-major, twenty-three company officers, and two hundred and nine non-commissioned officers and privates, out of an aggregate strength of two hundred and seventy-four. This was the date of the largest attendance, being the day on which the governor reviewed the command. Of these seven companies five were from the city of Mobile, one from Greenville, about 120 miles distant, on the Louisville and Nashville Railroad, and one from Evergreen, 80 miles from Mobile, on same railroad.

ARMAMENT OF THE COMMAND.

The armament of these companies was one hundred and seventy Springfield rifled muskets, old pattern; two 3-inch rifled cannon, and two Gatling guns, caliber .45. Six of the companies were armed with the muskets, and one, a Mobile company, was armed with the field-pieces and Gatling guns, and designated as a battery. These field-pieces and Gatling guns were in good, serviceable condition, with the exception of the front sights on the 3-inch guns, which were unserviceable, and all bore evidence of good care. The 3-inch guns were fully supplied with limbers, caissons, and harness, and the Gatling guns with limbers and harness. The harness, however, is very old, and would not stand rough service.

PERSONNEL OF THE LIGHT BATTERY.

Concerning the *personnel* of this battery, the numbers are too limited to man more than the platoon of 3-inch guns, and this in an imperfect manner, with four horses to the carriage. The platoon of Gatling guns alone could be put promptly into the field on an efficient footing for service—having sufficient ammunition on hand to meet any sudden emergency not too exhausting in its demands. There is also on hand a small supply of ammunition for 3-inch guns—both powder and projectiles. The men of this battery seem to have a pretty good knowledge of their duties as cannoneers. The expense, however, of hiring horses precludes the experience necessary to efficient drivers. The carriages are not horsed oftener than five or six times in the course of a year. The officers of the battery impressed me as being well informed and zealous.

CONDITION OF ARMS.

In addition to the one hundred and seventy muskets in camp on the 18th instant, the colonel informed me that he had a reserve of about forty. These latter, however, were mostly in an unserviceable condition. A majority of those in camp were in serviceable

condition, though nearly all of them evinced a great lack of care. Probably fifty of them were almost totally unserviceable from neglect. This was specially noticed in the company from Evergreen. Out of probably a dozen that I examined in this company there was not a single gun that I would not anticipate unfortunate results from in case it was fired, and this in consequence, principally, of the guns being eaten up with rust.

INSTRUCTION.

A majority of the infantry companies appear to be well up in squad and company drills. Some of them show that much time and care have been successfully expended in perfecting themselves in these drills, attaining a precision of movement that I have never seen surpassed. The instruction, however, has extended but little beyond this, skirmish and battalion drills and target practice having been almost entirely neglected. While in camp one afternoon was devoted to target practice, about fifty men, such as elected to do so, firing two scores each. As might be expected, the exercise showed a great lack of system, instruction, and practice. A guard was kept on during the encampment, and an effort made to give each company officer, non-commissioned officer, and private a tour of guard duty. This duty was not carried out in as soldierly a manner as I hoped to see, chiefly because of the inexperience and consequent lack of confidence of all concerned. I was impressed with the idea, however, that a large proportion of both officers and men were very anxious to learn as much as possible of military affairs, inviting suggestions and criticisms on all occasions.

COMMANDING OFFICER.

Col. F. P. Davis, the colonel of the regiment, was, unfortunately, in ill-health throughout the encampment, and the command chiefly devolved upon the major (Wimberly), who had recently been appointed, who has had a very limited experience, and who strongly impressed his lack of confidence upon his command. Colonel Davis is a person of more experience, and, in my opinion, has good judgment, confidence, and force, and appears anxious for the efficiency of his command. It was unfortunate for the regiment that illness prevented him from exercising the command during the encampment.

REGIMENTAL STAFF.

The regimental staff impressed me as being zealous and efficient. The quartermaster especially seems to have distinct and practical ideas concerning his duties should the command be called into service.

READINESS FOR SERVICE.

This idea of service in the field seems to have considerable weight with this command. The guns and accouterments, fatigue uniforms, tents, and sufficient ammunition to meet a sudden emergency, are kept constantly at the armory, and a system arranged for assembling promptly. There is little or no camp equipage on hand beside the tents, of which each company is the owner of a fair supply, exclusively wall-tents. With the exception of two companies that have no uniform fit for rough service, the regiment could take the field on a few hours' notice, and in pretty fair condition for service. There are many points, of course, in which they would be greatly defective; originating in limited opportunities, the scant support they receive from the State and the United States, and the system which obtains in many, if not all, of the companies of wasting time in endeavoring to reach mechanical precision in certain directions, while neglecting what would be more useful in actual service. This precision on drill and parade, in connection with a showy uniform, is calculated to win the admiration of the populace, which is the reward that is chiefly looked forward to, and is the inducement, above all others, that keeps up and gives vitality to the organization. Such things as are not conducive to this end are most generally neglected.

FINANCES.

The State allows \$50 per quarter to each organized and uniformed company and an addition of 50 cents per day per man (non-commissioned officers and privates) while in the camps of instruction. The officers have a larger allowance—about \$2. This money is collected by the quartermaster of the regiment and expended in defraying all expenses, in so far as it will go, connected with the equipment, instruction, and service of the command, and this, in connection with what is allowed by the United States for the purchase of arms, ammunition, and accouterments, is all to which they are legally entitled.

MEDICAL DEPARTMENT.

An interesting feature of this organization is the medical department. The surgeon, assistant surgeon, and hospital steward constitute a part of the regiment, and are prepared to move with it to any point on short notice. The surgeon has a field-case in readiness, apparently well supplied with medicines, and medical and surgical appliances. Both the surgeon and assistant surgeon are physicians in good standing in the city of Mobile.

RECOMMENDATIONS.

In concluding this report I have but few recommendations to make that are not indicated in the foregoing. I think it advisable that the companies should all have the same uniform, in so far at least as the fatigue uniform or dress for field service is concerned. At present such is not the case. A simple, plain, but serviceable fatigue uniform might be prescribed by the State authorities for all its troops, to which the companies might gradually conform within a limited time, say one year. I talked with several of the officers on the subject, and they strongly favored the idea of a common uniform for all.

I also think it advisable that, if instead of establishing these encampments in the immediate vicinity of the homes of the members of the command, they be located at some more distant point, say at least one day's march, it would result in very great advantage. In this case business and social influences, that now hamper every effort at imparting instruction, could be more easily overcome, and the men held in hand for practice in battalion drill, skirmish drill, target practice, guard duty, and many other things so essential to the success of troops in service.

Respectfully submitted.

R. G. HOWELL,
Captain Second Artillery.

INDEPENDENCE, PRESTON COUNTY, WEST VIRGINIA, July 13, 1886.

To the Adjutant-General United States Army:

GENERAL: I have the honor to report that in accordance with instructions from your office I visited the camp of the Maine militia, at Bangor, Me. I arrived there Tuesday evening, June 29, and reported at once to Brigadier-General John Marshall Brown, commanding State troops, by whom I was most courteously received. Being almost time for dress parade, I walked out with General Brown and saw the parade of the Second Regiment, Colonel Henry L. Mitchell. I was very much struck with the size and physical condition of the men. Tall, straight, stalwart, and broad-shouldered, they far surpassed in physical quality anything I had seen in the way of militia. The line was fairly formed, the manual was rather slow, and the time irregular, due to the very large number of recruits, fully one-third of the entire command being men who were in camp for the first time.

The organization of the command is as follows:

John Marshall Brown, brigadier-general commanding, and staff—total, 8.

First Regiment Maine Volunteer Militia, Colonel John J. Lynch and 6 field officers; eight companies, with present, 29 commissioned officers and 308 enlisted men; absent, 3 commissioned officers and 160 enlisted men.

Second Regiment Infantry, Colonel Henry L. Mitchell and 7 field officers; eight companies, with present, 30 commissioned officers and 364 enlisted men; absent, 1 commissioned officer and 112 enlisted men.

Frontier Guards (unattached), on duty at brigade headquarters; present, 3 commissioned officers and 47 enlisted men; absent, 4 enlisted men.

First Battery Light Artillery, present, 5 commissioned officers and 61 enlisted men; absent, 10 enlisted men.

Total present, 75 commissioned officers and 780 enlisted men; total absent, 4 commissioned officers and 286 enlisted men; aggregate present and absent, 1,145. This is made from average of three morning reports, June 29, July 1 and 2.

The command was encamped upon the State fair-grounds consisting of an inclosed space of about thirteen acres of rather rough ground, on which was laid out a well-graded mile track, and the space inclosed by the track was also fairly well graded, while the space outside consisted of quite irregular and broken ground. The soil was a chalky clay, which when stirred up produced clouds of dust, which occasioned great annoyance. It was not at all a favorable location for a camp; crowded with fences, buildings, stables, stands, &c. It was furnished, however, with abundance of excellent water, and was high and cool.

The messing arrangements consisted of a large building fitted up with tables and having a steam-cooking department provided with two boilers of sixty gallons capacity each for coffee, four for water; one steamer for potatoes, capacity three barrels; one fat receiver, one steamer for fresh and one vessel for corned beef. I examined and tasted everything that went on the table, and found the bread excellent; the potatoes thoroughly cooked and of good quality; the coffee very fair, although rather weak; the meat thoroughly cooked and retaining much more of the juice and flavor than boiled meat, but not seasoned enough, and very insipid as compared with roast or broiled meat. I questioned the men and found that there was no stint in anything. They complained of the weakness of the coffee during the first two days, but said it had improved after that. I found all the company officers messing in the same building and on exactly the same fare as the men, except the officers of Company D (Norway Light Infantry), who ran a company mess.

The tents were serviceable, generally well pitched and floored, although some floors were loosely and badly laid.

The police was only fair; a good many floors showed abuse, stains of tobacco-juice, oil, &c.; there were too many cans and sardine-boxes lying around; although it is only justice to say that being upon a fair-ground, used for all sorts of purposes, the command was probably not responsible for much of the litter, and the task of cleaning was made correspondingly laborious.

DRILLS AND CEREMONIES.

At guard mounting the observer was struck at once with the unusually fine physical quality, and also with the fact that there was a large percentage of absolutely raw recruits. The second guard mount was attended with great difficulty in getting fours counted, the sergeant major being obliged to call off in whole numbers, and finally in platoons of eight; officers of the guard were slow in finding their places, and non-commissioned officers showed great hesitation. The men were unsteady during inspection, the manual of inspection was bad, and open boxes irregular; parade rest and attention very fair. The wheels were very good except for the failure of the pivots to stand fast; passage and salutes very fair. This gives a fair sample of the guard mounts until the last morning, when there was a marked improvement in all respects except the pivots.

The dress parades were very fair in the Second Regiment, and very good, indeed, in the First; in the Second the parade rest of the third and sixth companies was noticeably good. During the beat off the drum major saluted in passing the commanding officer—a universal custom in this militia. The men were admirably steady and attentive during the beat off; occasionally the stock of a musket would be turned the wrong way at parade rest. The command "attention" did not seem to be well heard, and was usually obeyed irregularly; the "present" and "carry" were always fair and toward the last good. The manual was only tolerable; irregular, from the large percentage of recruits, and showing a want of snap. The company officers showed a very fair knowledge of their part of this ceremony, and the salutes of the first sergeants were admirably soldierly, except that in this regiment they insisted upon prefixing the word *all* to "present or accounted for."

The parades of the First Regiment were conspicuously good. There were some flaws, especially at first, such as first sergeants marching on with unfixed bayonets and company commanders giving "support arms" before the companies following them had got upon the line, but the excellence was very marked. The parade rest of the fifth, seventh, and eighth companies was excellent, the fifth almost perfection. The manual was very good, excellent time, and in many of the companies marked with a snap and precision that spoke very highly for the knowledge of the officers and the quality of the men. The commands were admirably given by Colonel Lynch, who is an excellent drill-master, tactician, and disciplinarian. The officers' line was admirably dressed, and their final advance and salute smart from the highest professional standpoint. In both regiments officers always omitted to unhook their scabbards in drawing or returning swords.

DRILLS.

The company drills were marked by painstaking on the part of the officers and great interest and evident desire to learn on the part of the men. I was particularly struck with the care and patience bestowed upon rudimentary formations before proceeding to other movements. I saw one company commander executing front into line in quick time over and over until each four obliqued opposite to its place and came on the line in good shape. The step was good, in time, and nearly of tactical length. The weakest points were the loadings and firings, due to the officers' want of knowledge as to nice points. The position of the feet was often bad, and the ready very irregular, muskets being at all heights. The actual firings were better than the drill.

Company E, Montgomery Guards, of Portland, Capt. John A. Gallagher, First Regiment, is probably one of the best drilled companies in the Eastern States, and gave an exhibition drill which was really wonderful. Their wheels about in line and column and their obliques were superb; their firings the best I have ever seen in my life. I don't remember ever having seen even an attempt in loading at will to have the muskets brought to a ready together; but they had attained such accuracy that you could not have told that the command "ready" had not been given. Their left oblique aim and recover was apparently done by clock-work, and their firings, kneeling and lying, beautiful.

The battalion drills showed, of course, the large proportion of recruits; but it was a noticeable fact, and one that speaks well for the rank and file, that most of the mistakes were on the part of the officers. The matter of guides and markers was very negligently attended to in the Second Regiment, markers being placed for ployments, guides often failing entirely to come on the line. Distances in close column were also very irregularly taken. In breaking by companies from the right to march to the left all the companies but one wheeled instead of turning. Double column was executed at close column distance instead of company distance, and the same failure of pivots to stand fast as was noticed at guard mount was shown.

I would feel inclined to say that the most important point in drill for the militia is to make guides understand that for them the command "march" in many cases, *e. g.*, all wheels from line to column and *vice versa*, means halt.

The First Regiment did not undertake so much, or go over so much ground, but did better what they did attempt, although in the matter of guides and markers they also showed great want of instruction. The men in both regiments did admirably considering their instruction, and maintained the high reputation of the American soldier for individual sense and quickness of perception.

The review for the governor was most creditable, and the entire command showed to the best advantage of any time during the encampment. The Second Regiment had the right of the line; the ranks were wonderfully steady during the review, and the light battery looked extremely well in battery. In the passage the Second Regiment was very fairly aligned, but their rear ranks were much too far; the fifth and eighth companies did the best, both being excellently aligned and fairly closed. The salutes were good. The First Regiment did itself great credit; the alignment of the first company was superb and their rear rank up to if not a little closer than tactics; the third excellent in both; the eighth excellent in dress, good in distance; all fair. The battery was excellently aligned as to first pieces of the first platoon; caissons fair. Dress of the pieces of the second fair; caissons good. The guns were beautifully polished; harness serviceable throughout; sweat-blankets worn and shabby; men looking, riding, and sitting very fairly. The wheel into line was good and the whole ceremony very successful.

INSPECTION.

The inspection which followed showed the command as follows:

SECOND REGIMENT.

The arms were the Springfield breech-loading, caliber .45; condition generally good, in many cases excellent, in a few poor. Companies A and H had the best arms; in both they were up to a good standard of professional troops in garrison. The bayonets were in good condition, and the scabbards the pattern in use in the United States service, and in excellent order. The brasses were, in all cases, clean and bright. The belts were worn but serviceable.

The uniform consists of a helmet for dress and a cap for undress; a coatee, with three rows of buttons in front and long tails turned up with yellow; and a Burnside plaited blouse. The dress uniform looks handsome in front, but is antiquated and grotesque seen from the rear side. The blouse is serviceable, but not at all popular with the men, as was the case with the same blouse when tried in the regular service. The uniform has been in use seven years, and is worn, and in many cases shabby, and should be replaced as soon as possible; it shows excellent care, and is in much better condition than could be expected.

The knapsacks were neat, and as good as any that are carried on the back. No haversacks or canteens are issued—a most serious omission, and one that should be remedied at once.

The men's hair was, in all cases, neat and short, and the appearance of the men worthy of the highest praise. The difference between this militia and that of the States where there are many large manufacturing centers is most striking. Instead of the round backs and stooping shoulders of men accustomed to bend over the work-bench, you see

the frames and figures of lumbermen, farmers, and men accustomed to pursuits which develop health, strength, and stature. I saw many companies which inspired feelings of positive envy and a wish to enlist every man, while their figures were such that, although much cruder in most respects than the militia of New York or Massachusetts, they almost attained the setting up of veterans. It was nature's setting up; that was all the difference.

The manual of inspection was very bad; almost as bad as it could possibly be, many men having difficulty in getting their pieces to a position where the inspector could grasp them. The cartridge-boxes were the McKeever pattern; much better than any I have seen in the militia, and in good, serviceable condition, with no attempt at polish.

FIRST REGIMENT.

This regiment was marked by greater differences than the Second; the muskets were all good except the crack Montgomery Guards, and they were, strange to say, the worst in the command and positively unserviceable, being so rusted that the rifling could not be seen. They claimed that they had been long in use; but I cannot imagine that ten years' wear, if the arms were properly cared for, could produce such a condition. I suspect that in some companies extreme smartness in drill and frequent exhibition performances tend to the neglect of some important and solid parts of a soldier's training. Most of the muskets in this regiment were in first-class condition, many of them what we would call orderly muskets, noticeably Companies C, D, and B. The other equipments were as in the Second.

The men showed also greater variation, as might be expected from the much larger proportion of the manufacturing element; so that while the average of appearance was hardly up to the Second, nearly half of the companies were really magnificent. Company D was in every way one of the finest companies I have ever seen. The Montgomery Guards, in all but muskets, were simply perfect, as far as appearance went, and B and F Companies little behind.

The manual of inspection was decidedly better in the Montgomery Guards, being really very fair, and was perhaps in this regiment generally a trifle better, though still very bad.

THE BATTERY.

The battery had admirably clean guns; fair harness; horses about the same as hired horses usually are, perhaps a little more ungainly and awkward than where large cities can be drawn upon for street-car and truck horses. This part of the State does not produce much in the way of horse flesh. The driving was unusually good, considering, and the men of a very fine class, intelligent and attentive. The officers were good; the carriages serviceable, though necessarily dirty from the clouds of dust that attended this encampment; the iron sheathing of the lids of the chests was torn and ripped in some places. In addition to the four brass pieces they had a Gatling, with the barrels inclosed in a solid case. Many of the cartridges were too short, and jammed repeatedly. I questioned the men and found that they knew little of the nomenclature of the piece. The standing gun drill was very fair, and their firings generally very good. The mounted drill was very creditable, considering the hired horses, and the captain a very efficient and intelligent man. Their tents were not as neat nor their camp as well policed as in the infantry.

TARGET PRACTICE.

This was the most important feature of the Maine encampment, and a marked contrast to most State encampments, where this part of a soldier's duty is apt to be done in a very perfunctory and lifeless manner.

The inspector of rifle practice is Col. E. C. Farrington, probably the best inspector in the New England States; judging by the results attained, I should say one of the best in America, for any one who has had much knowledge of the militia knows under what disadvantages and discouragement rifle practice is carried on. There is almost an inevitable conflict between the inspector and company and regimental commanders. So much is to be done in so little time that the man who is zealous in drill and tactical exercise naturally grudges the time devoted to something which, however valuable and necessary, does nothing toward attaining that military bearing and proficiency by which largely the ability of captains and colonels must be judged by the critic and by the public at large.

The first contest that I witnessed was on Wednesday morning, and was what is known as the company skirmish match, conditions not less than twenty-five men to compete; distance, 250 to 100 yards, unknown to companies; rounds, ten (five advancing and five retreating); to halt and fire at the whistle, off-hand, one shot at each halt. Twelve com-

panies competed, with the result given below. The men were formed at such interval as the size of the company would admit, from 3 to 6 yards; the command "advance" was given, then a signal from the whistle, a halt, and one shot fired; then the signal to advance, and so on up to near the 100-yard limit; then retreat, with halts as above. I was struck with the admirable practical discipline enforced and shown in this exercise; the skirmish line was well preserved and aligned, both in advance and retreat; not a single man fired before the proper time; there was not a musket fired before being carefully aimed; not the faintest indication of haste or flurry; and not the smallest accident of any kind. As will be seen by an examination of the table, the average was very good. Not a single company did badly, considering their very limited opportunity for practice compared with time devoted in our own service.

Four companies made over 850 points, that is, over 260 hits out of 350 shots, while the work done by the Eastport company is, I think, very remarkable—out of 360 shots 333 hits, 2 miss fires, 4 shots lost; so that the actual score fired was 333 hits, 21 misses. This company deserves special mention, being composed of the very best material in the town, which enjoys the distinction of being the most easterly settlement in the United States. Almost every man in the company is a crack shot; almost every profession in the town is represented—lawyers, physicians, business men. Their pride in the organization and *esprit* is so strong that in steadiness, sobriety, quick and cheerful obedience they might be well taken as a typical representation of the best elements of American manhood. I append the tabulated score, ten shots per man, five advancing and five retreating, third-class target; distance 250 to 100 yards, unknown:

Organization.	Men.	Bulls.	Centers.	Inners.	Outers.	Hits.	Score.
Company C, First Regiment	27	18	42	49	52	156	484
Company F, First Regiment	35	11	45	50	61	167	487
Company G, First Regiment	35	17	95	106	75	293	933
Company H, First Regiment	29	5	30	44	46	125	369
Company A, Second Regiment	37	9	64	72	81	226	679
Company B, Second Regiment	36	13	70	68	57	208	663
Company C, Second Regiment	36	21	104	88	72	285	929
Company D, Second Regiment	51	13	89	103	93	298	916
Company E, Second Regiment	35	20	102	86	53	261	872
Company G, Second Regiment	38	5	39	50	34	128	395
Company H, Second Regiment	31	9	23	43	57	132	380
Frontier Guards, Eastport, unattached..	36	16	151	121	45	333	1,137

The next match was fifty men from each regiment, taken from different companies, distances 400 to 100 yards, unknown; rounds, twenty, ten advancing and ten retreating; second-class target. In this match the men were more crowded and the number of shots twice as great; distance nearly double. The same admirable order and discipline prevailed. Owing to the fact that the first 80 yards was in a field filled with stumps, and separated from the target by a high rail fence, the first three rounds advancing and the last three retreating had to be fired from the shoulder; that is to say, at the very longest distances. What was very noticeable was the admirable instruction shown on the part of officers. The sights were only changed once; all the shots within these two elevations were aimed by allowance; and at each halt you would hear the officers' instructions, so much "below the bull's eye," "just below the four ring," &c. By inspecting the table it will be seen that only 201 bullets in the First Regiment and 142 in the Second failed to hit the target out of 1,000 shots; that inners outnumber outers, and centers outnumber inners:

Organization.	Men.	Bulls.	Centers.	Inners.	Outers.	Hits.	Score.
Second regiment	50	236	290	214	118	858	3,218
First regiment	50	180	278	314	119	799	2,932

This day's shooting concluded with an exhibition match, made up on the ground, one hundred men from the brigade; conditions the same as in the regimental match. In this contest the men were so crowded that it was practically a line of battle. The fact that with at least four or five different positions assumed there was not a premature discharge or the smallest accident speaks volumes for the practical discipline which could bring out such results. Just before the 100-yard limit was reached the target was so shot away that the dirt falling through from the butt brought it to the ground, and

a new one had to be substituted—a fortunate occurrence, as otherwise the bull's eye and center would have been practically obliterated, and a count would have been impossible. Many of the spectators were veterans of the war, and they agreed that the fire from these one hundred men would have annihilated any thousand men that either side could have produced during the war; that in such a fire Ricketts' Division could not have got half way across the open ground. My experience in skirmish firing is very small, as we have been unfortunate in having no range for the past five years, but it struck me as being quite marvelous, and as justifying in itself the existence of the Maine militia.

On Thursday morning was the regimental team match; five men from each regiment; ten rounds each, five at 200 and five at 500 yards, as follows: First regiment team, 200 yards, 91, and 500 yards, 88—total 179; Second regiment team, 200 yards, 84, and 500 yards, 88—total, 172. The day was hot and the men tired. There were no flags or means of estimating force and direction of the wind, which was high.

In regard to habitual practice, all of the companies in the Second regiment, except F, have target practice constantly and regularly. More attention is paid to skirmishing than to known distances, or, rather, more time devoted. In the First regiment four companies have regular and constant practice; the others pay little attention, being in the cities where the facilities for constant practice are wanting, and every incentive is present to the company commander to devote all time possible to drill and appearance.

GUARD DUTY.

Guard duty is poorly done. This is the weak point of the Maine militia. Sentinels rarely saluted during the day and were still more rarely right. When I visited the guard tent I found both officers of the guard absent, and no one seeming to know their whereabouts or being apparently in charge. In fact, out of a guard of at least eighteen men only half a dozen at the most were present. At night guard duty was much better, and the sentinels, as far as my observation went, always challenged; and although very crude, seemed very anxious to do their duty.

Military courtesy was almost entirely neglected; men rarely ever saluting an officer, and never rising or standing at attention.

INSTRUCTION.

The orders require a semi-monthly drill in the armories, of which a return is made in the form of a morning report, through the usual channels, to the adjutant-general. These orders are not always carried out. In addition to this prescribed drill there are, of course, many drills, varying in number and thoroughness according to the zeal, knowledge, and ability of the company officers. Some companies, noticeably the Montgomery Guards, give proof of constant and unremitting drill. Some show great want of knowledge of details, but all are able to get fairly through all ordinary company movements. The great difficulty in this State is due to its size and scattered population, giving to so many companies absolutely no standard of comparison, no chance for emulation, and little opportunity for improvement. The great want is a thorough, systematic course of instruction prescribed from headquarters and rigidly insisted upon, and the immediate establishment of an examining board, before whom all officers reported by the inspector-general as ignorant and incompetent could be brought and remorselessly dropped. Such a board, coupled with great personal zeal on the part of the adjutant-general, has done wonders for Massachusetts. Guard duty should be especially taught and practiced in the armories.

Target instruction in the Second regiment is most thoroughly taught, and in about half of the companies of the First, but the companies in the large cities, as is quite natural, show much greater proficiency in drill than in shooting.

Discipline within certain limits is very good. Sobriety is an almost universal rule. The camps were perfectly quiet and orderly at night, and when under arms and on the field orders are obeyed in a way that shows willing, self-respecting, and intelligent men. The defects are a rough, noisy joviality when not on duty, which does not always respect the persons and authority of officers, and a sturdy, rather obstinate independence, which rather clamorously demands some good reason for doing or ceasing to do a thing. But the severe test of shooting at all distances, and in large numbers, shows a practical discipline which argues great things in actual service. I would trust the Maine militia in a mob or riot to give as good an account of themselves as any I know in America.

I mixed freely with the officers of all grades, and was delighted with them. Almost all young, and such earnest, ardent, manly fellows, that a soldier's heart can not but warm to them. Take as an instance the Frontier Guards and Norway Light Infantry; what material! The very pick and flower of the people. The latter has only been or-

ganized for a few months and is already one of the best companies in the State. Even where the officers are crude they are so anxious to learn and improve that one feels how necessary systematic instruction is.

STAFF DEPARTMENTS.

Of the present staff it is only necessary to say that a good general almost always has a good staff. The services of General Brown are simply invaluable; a soldier of large and long experience, a broad, cultivated, able man, he has those inherent qualities, assisted by wealth and the highest social position, which command the respect of all men and carry a personal weight which is to an officer of rank in the militia, where the means of enforcing respect are so limited, I would almost say a *sine qua non* for the highest efficiency. His staff is an admirable one, almost the very best I have seen; not a man for ornament and all for use. At headquarters you would never for one moment see or hear anything that would not suggest professional soldiers of the highest type.

The quartermaster's department is well organized as far as it goes, but has no means of transportation beyond the railroads, and would require a good deal to be done before the command could take the field. There is no regular supply of clothing at depot, but in the store-house some extra clothing is kept on hand.

The medical department is not organized, and there is no regular hospital service. They have, however, four hospital-tents, and medical supplies are purchased from time to time.

The ordnance is of excellent quality, the muskets good and in good order, the bayonets, scabbards, and cartridge-boxes the best in the Eastern militia. There is no separate ordnance department, but it is, as is usual in the militia, included in the quartermaster's department.

The commissary department is very well managed and efficient. Rations are issued every day to the command and cooked by the steam process. There is, besides the commissary, a commissary sergeant, and the regular returns are made to the adjutant-general. There is in this department the absence of all show and of officers appointed to wear uniform. Instead of a chief with several assistants, there is the commissary, Capt. William W. Whitmarsh, and the commissary sergeant; and yet this organization can supply four times the present force, and is ready to take the field at any time.

Of the inspector-general's department I cannot say much from my own observation, as a sad accident disabled General Richards during the encampment, on the second day of his stay in camp. General Brown speaks in the warmest terms of his ability and soldierly qualities; he is a cavalry officer of the war. From the general appearance and instruction of the command, I think it is safe to say that in this large and scattered State more frequent inspections should try to make up for the absence of standards.

RECOMMENDATIONS.

The first and crying need of this command is thorough, systematic instruction. The material is splendid; zeal and intelligence are the rule, but the zeal must be wisely directed, the intelligence cultivated. Upon the inspector's department, backed by an able and fearless examining board, utterly removed from political influences, must rest the responsibility for inaugurating a system under which individual intelligence can take up and bring the work to perfection. Inspections, especially in the country towns, should be frequent, searching, and comprehensive; guard duty especially should be carefully taught and practiced. If it would be possible for the War Department to detail officers, to report to the governors of the various States, to be assigned to duty as instructors solely, with no command whatever, it would be of the greatest assistance to the inspector's department and benefit to the State.

Next to instruction, the Maine militia wants money. The appropriation is most niggardly. Of course, this is something entirely outside of my province as an observer and inspector, but I can not help speaking of it, hoping that when the legislators of this large State, so exposed in situation, the very frontier and barrier of the United States, read of the splendid material of which their militia is composed and see such fruits as their shooting, they may recognize some of the possibilities that the future holds out and vote them a decent support.

After discussing the subject of cooking with Captain Whitmarsh, and being at some pains to inform myself upon the working of steam cooking, it seems as if the experiment of company cooking were worth trying. Certainly for any length of time this process would be almost intolerable and not wholesome, from its absolute monotony. In Massachusetts and New York all cooking is done by a regular caterer, and it is so good and the table is so varied that a change to the Army system would produce great discontent, and eventually drive many men from the State service; but in this State the men would,

I think, prefer their own cooking. It might not be so good, but it would enable them to have much more variety, and would have the great advantage of assimilating their tour of duty as much as is possible to the conditions of active service.

Haversacks and canteens should be furnished as soon as possible.

A medical department should be organized as soon as practicable, and a hospital service and ample medical supplies be a feature of all future camps.

In conclusion, I would wish to express my appreciation of the great courtesy and kindness that I met on all sides. To General Gallagher, the adjutant-general, I am indebted not only for the utmost personal kindness, but for much valuable information which I would not have had time to obtain myself; it is to him that I am largely indebted for my information upon the subject of the staff departments. To General Brown and his most efficient and gentlemanly staff and to Colonel Farrington, the indefatigable inspector of rifle practice, my most sincere acknowledgments are due.

I am, sir, very respectfully, your obedient servant,

EDWARD FIELD,
Captain Fourth Artillery.

FORT MONROE, VA., July 25, 1886.

The ADJUTANT-GENERAL UNITED STATES ARMY:

SIR: I have the honor to report that, in compliance with Special Orders No. 115, current series, War Department, Adjutant-General's Office, I proceeded to the camp of Michigan State Troops, at Island Lake, about 3 miles east of the town of Brighton, Mich., arriving on the morning of the 15th instant, where I reported my arrival to Brigadier-General James H. Kidd, inspector-general, and to Governor R. A. Alger, who, with his staff, was present, and remained until the breaking up of the encampment began. I was furnished with a horse, tent, and servant, and every necessary convenience for my comfort.

I found the camp to consist of about six hundred tents, laid out in accordance with regulations, two companies occupying the same company street, each company on opposite sides of the street.

The regiments in camp were the First, Second, Third, and Fourth, commanded, respectively, by Cols. D. H. McComas, John D. Sumner, Charles S. Brown, and Eugene Robinson; and they were encamped from right to left in the order of their regimental numbers, and on parade, brigade drill, &c., they were formed in the same order. With the exception of the Fourth Regiment, the companies are widely separated. Brig. Gen. J. C. Smith commanded the brigade. The Second and Third Regiments consist of ten companies, and the First and Fourth of eight.

The following table represents the strength of the brigade July 19:

Troops.	Present.		Absent.		Total present and absent.	
	Officers.	Men.	Officers.	Men.	Officers.	Men.
Brigadier-general and staff.....	8	1	.....	.....	8	1
First Regiment.....	32	364	.....	8	32	372
Second Regiment.....	35	463	1	14	36	477
Third Regiment.....	37	562	.....	25	37	587
Fourth Regiment.....	32	420	.....	35	32	455
Total.....	144	1,810	1	82	145	1,892

From the above table it will be observed that only a little over 4 per cent. of the enlisted strength of the brigade were absent. A brigade band of about twenty-four pieces is not included in the above table.

The camp was established before the arrival of the troops, the tents being pitched by hired labor, so that on the arrival of each of the organizations it went immediately to its quarters.

All the regiments were in camp by 5.30 a. m. of the 15th, and the morning gun formally announced the opening of the camp. An order prescribing the daily routine of camp duty was issued to the command.

Calls were sounded at brigade headquarters and taken up by the several regiments.

THE CAMP.

Each tent was furnished with a good board floor, and in some there were arm-racks, but the most of the tents were not furnished with them, or with hanging shelves for spare clothing. There was no general uniformity in the arrangement of the tents in the command, each company being permitted to follow its own taste. Bed-sacks, filled with straw, were furnished throughout the camp, but some of the companies had cots, others roughly-constructed bunks, but most of the men slept on the floor. Valises, trunks, and boxes of various kinds detracted from the military appearance of the tents. For uniformity in arrangement I would recommend that each tent be furnished with a shelf suspended from the ridge-pole, a gun-rack, a locker with as many compartments as there are men occupying the tent, and a camp-stool for each man; that the men be required to use the bed-sacks furnished by the State, laid upon the floor, and that during the day the bed-sack be doubled and the blankets be neatly folded and laid upon it.

Each company should be required to raise its tent-walls at police-call in the morning, to remain so until retreat, for the proper airing of the tents. There was no uniformity in this regard throughout the brigade, though I noticed it in one regiment.

A kitchen built of boards was furnished each company, and a large mess-tent capable of seating the whole company was also provided.

Six men occupied a wall-tent, as a rule, throughout the camp, which I think is more than should be so assigned.

The ground upon which the camp was pitched was rolling in its character, well adapted for a proper drainage, and the soil was light, with gravel underlying it. During the period of the encampment it was very dusty, and a few days more without rain would have made it very disagreeable. Water was supplied from Island Lake, near which the camp was situated, by hauling.

POLICE.

The camp was at all times in good police, the rubbish being swept into heaps and removed by wagons which went the rounds of the several commands. I made frequent inspections of the camp and always found the grounds in good order. The vicinity of the kitchens was in commendable order; pits being dug in rear of each to receive slops and refuse, earth being thrown in frequently. I noticed no disagreeable odors there at any time. Sinks, surrounded by screens, were established for each command. Earth and lime were thrown in daily, and no offensive odor was perceptible. In fact the police and sanitary arrangements of the camp were excellent.

DRILLS AND CEREMONIES.

Formations for all drills and ceremonies were made with commendable promptness as a rule. Brigade guard mounting took place each morning at 8 a. m. The first one I witnessed, on the morning of the 16th, was very badly conducted on the part of the adjutant, and the men were very unsteady; but the wheeling by platoons and marching was very good, the lines keeping well dressed. Each regiment furnished the guard detail for the day in rotation, the guard being mounted by the adjutant of the regiment. The mistakes of each day were rectified on succeeding ones, and the later guard mountings were well and properly conducted.

Battalion drill took place daily except on the 19th, the day on which the governor reviewed the brigade. The companies forming these regiments being widely scattered, except those of the Fourth, they do not come together for battalion drill until they meet in camp each year. Of course there were mistakes made, but they were usually corrected by the officers, who all manifested a good knowledge of their tactics. The principal faults were losing distance by the guides; too much distance between rear and front ranks; some of the guides being at right shoulder arms, while others were, correctly, at a carry; guides not covering accurately in column. There was a gradual improvement daily, and the marching and alignments were exceedingly commendable from the commencement. The firings were correctly executed, but there was a want of unanimity in the volley-firing.

There was no battalion skirmish drill. I regard it as of the utmost importance that great attention and much time should be given to this matter. It is a settled fact that most of our fighting in the future must be done in open order, and a thorough acquaintance with skirmish drill is of the greatest importance. I saw no skirmish drilling except by one company, and that indulged in at the sham fight.

A brigade drill, in which the four regiments took part, took place every afternoon except one. General Smith handled the brigade skillfully and caused it to perform nearly all the movements provided for in the tactics, and the colonels of regiments, re-

ceiving notification of movements through an aid of the general, handled their regiments in a manner that showed a familiarity with the tactics. I would especially commend the whole command for its drilling and appearance on the field, which was only marred by a want of steadiness. I understand that about 50 per cent. of the brigade is new, and, taking this into account, I am not inclined to criticise the want of steadiness at drill. The step of thirty inches has not been adopted as yet.

The stated roll-calls, reveille and tattoo, were, to say the least, ragged affairs. The men did not fall in simultaneously in all the regiments at the sounding of the assembly, but, in many instances that came under my notice, at the seeming convenience of the first sergeants. When the companies were formed the men presented anything but a military appearance. They were variously dressed, some in caps, others in helmets or citizens' hats. I noticed some at reveille in citizens' overcoats; some in their shirt sleeves. There was no semblance of standing in the position of a soldier; each stood as seemed most comfortable to himself, and talking in ranks was carried on unchecked. I also noticed a number of men deliberately smoking cigars in ranks. An officer was generally present at roll-calls, but his presence did not serve to correct the irregularities; in fact, I saw no attempt to do so.

DISCIPLINE.

The discipline of the command was fairly good. The men were all willing and generally subordinate, but seemed to think they were licensed to enjoy themselves after the work of the day was done. After retreat large numbers of them left the camp without authority, running the sentinels' posts, and going to Brighton, three miles distant; some taking the train, others walking. If there was any attempt to prevent their leaving camp it was ignored by them. Guards were sent out nightly in the direction of Brighton; on one occasion bringing back about two hundred. No punishment followed these infractions of discipline. The State laws provide, I understand, "that any officer or man absent from any one of the roll-calls shall be considered absent for the day and receive no compensation." It would be well to strictly enforce this provision of the law.

The signal "extinguish lights" did not seem to have any meaning to the command; no attention whatever was paid to it, and lights were extinguished at the pleasure of the occupants of the tents. There was a perfect din of noise in the camp nightly, even as late as midnight—shouting, cheering, singing, and marching about in squads, headed by drummers. There was not an attempt made to secure quiet at the signal, or to have the lights extinguished. It was impossible for those of the command who desired rest and sleep to obtain them. I regard this as one of the worst features of the camp.

TARGET PRACTICE.

No target practice was held in camp. I believe some attention is paid to it at home stations, but as far as I can learn it is not pursued methodically. The expenses attending rifle practice in 1883-'84 was \$3,172.60 for the two years.

PERSONNEL.

The *personnel* of the several regiments is excellent; better material could not be found of which to make good soldiers anywhere. I was particularly impressed with the ruddy, healthy look of the men and their youthful appearance. I do not think the average age would exceed twenty-five years. I saw only two or three gray-haired men in the ranks.

The officers are generally well up in their tactics, and impressed me favorably by their knowledge of the drill and the promptness with which they gave their commands.

The officers are elected, and appointed without examination as to qualifications. I would recommend that, if the elective system must prevail, every officer should be rigidly examined, as a prelude to appointment, by a board of officers, of which the colonel of the regiment, the brigade commander, and the inspector-general of the State shall be members.

Attention to military courtesy was not by any means what should have obtained. It was rare that the men saluted officers of their own or other companies or regiments. In passing through the camp I was saluted at times, but more frequently was passed by the men without their saluting. Salutes, when given, were not always from military positions. Men would salute while seated; others with coats unbuttoned and without assuming the position of "attention;" one saluted me while lying on his back. Cigars were not on occasions removed from the mouth when saluting.

There was too much familiarity between the officers and men. To sit in the company streets with the men, to drink and smoke with them, will not increase the discipline of a company or insure that respect which is indispensable in a well-regulated command. I noticed in nearly all my visits to the body of the camp enlisted men in and about the tents of their company officers. Whatever may be their relations at home, a line should be drawn, while on military duty, between officers and men. This is done in other militia camps which I have visited, and is strictly observed.

SUBSISTENCE.

Each soldier receives \$2 a day, 75 cents being for subsistence. Each company had its own kitchen and mess-tent, and employed caterers, who supplied them with food of excellent quality, in abundance and well prepared, cooked, and served. There was no attempt made to adhere to the Army ration, but it was such as most of them were accustomed to at home; any additional expense incurred was paid by subscription by the members of the company.

UNIFORMS AND EQUIPMENT.

The troops are uniformed in dark blue dress coats and blouses and light blue pants with dark stripe. The dress coats are single-breasted. The uniform resembles that of the regular Army very closely. They have the black cloth helmet, but in camp they wore the white summer helmet. Forage-caps are similar to those in use in the United States Army. The cloth used in the uniforms is of excellent quality, and was generally in good, serviceable condition.

There are only five hundred overcoats owned by the State—barely enough to supply one-fourth of the command. Only a sufficient number to supply the guard were brought to camp. Those I saw were of excellent quality. A sufficient number should be purchased to equip the whole command.

There are no canteens or haversacks either in hands of troops or the State. I deem it very essential that they should be purchased at as early a date as possible; also, that a tin cup should be added to the equipment. The knapsacks are very well adapted for their present use, but would hardly answer for field service.

The State blankets are of good quality, and uniform in each company.

ARMS AND EQUIPMENTS.

The arms in the hands of the troops are Sharp's and Springfield rifles, caliber .45, the former being largely in excess of the latter. Out of thirty-six companies only eight are supplied with Springfield rifles. The Springfield rifles are in perfectly serviceable condition. The Sharp's rifles have been in the hands of the troops for many years, and should be replaced by the Springfield as rapidly as the exchange can be effected. They are not generally in good, serviceable condition; the bayonets are not interchangeable, the exterior diameter of the muzzles varying. The mechanism is too complicated. There was a complaint that many of them would not explode the cartridges. On the morning that I inspected the command these arms were generally rusty and in bad order. These arms are cared for in the armories by armorers, and in camp the men are not supplied with the means for cleaning them. In each of the regiments, however, I noticed companies in which all the members had cleaned their arms. The Sharp's rifle having no hammer, the troops cannot bring their arms to the "support arms" prescribed in the tactics, but use the "carry arms" of Scott's tactics. This produces a want of uniformity. I noticed that a great many bayonets had screws lost, and a number of rammers were missing in the Sharp's rifles. Cartridge-boxes and belts are of United States Army pattern. They are all in serviceable condition, but need blacking.

GUARD DUTY.

A brigade guard was the only one mounted; the sentinels from it surrounded the camp, and were also furnished for the headquarters of the governor and the brigadier-general commanding the brigade. A large guard-tent was pitched for the accommodation of the guard, and liberally supplied with straw for beds. Reliefs were marched around and sentinels relieved in a military manner. I noticed that the sentinels in walking their posts timed themselves to arrive at the ends of their posts simultaneously and faced about together, always having the back of the sentinel in their front in view. They were, as a rule, so taken up with this that it was not difficult to cross a sentinel's post unobserved. Otherwise the sentinels walked their posts generally in a proper manner, though I noticed instances of sentinels standing and conversing with each other.

Arms were not always carried at a "right shoulder" and "support," as prescribed in tactics. I noticed some carrying their pieces in the hollow of the arm and at a "Scott's carry" when they were carrying the Springfield rifle.

Salutes were not always rendered to officers crossing, even when observed, and when rendered were not always correct. Many did not seem to be able to distinguish the grade of officers by their insignia.

At night the challenges were preceded in all instances by the command "halt." The guard duty at night was not efficiently performed. I do not think the corporal of the guard was called in cases where circumstances demanded it. No respect was paid by enlisted members of the command to the orders of sentinels, but crossed their posts singly and in bodies, totally disregarding them.

I would earnestly recommend that thorough instruction in guard duty shall be given in the armories; that guard mounting be held, and sentinels be posted and questioned. As a prelude to this the officers of the companies should be required to recite upon the duties of guards and sentinels. The inspector-general and his assistants, on their tour of inspection, should require the commands to exhibit their knowledge of these duties. The duties of guards are probably the most important that appertain to a soldier's service. The short tour of camp duty permitted the militia is not sufficient to give them thorough instruction in this matter. Not more than one-fourth of the command get a tour of guard duty.

BRIGADE HOSPITAL.

A neat brigade hospital was established in an orchard, at a convenient distance from the camp, and supplied with beds and every equipment necessary for care of sick.

SIGNALING.

There was no attention given to signaling. I would recommend that a certain number of men from each company, to include a sergeant and corporal, be detailed to learn this important subject, and that the necessary flags and apparatus for day and night signaling be procured. In case of riot, when telegraph lines are cut, it will be found useful and necessary.

PAY AND RATIONS.

The following shows the encampment pay and rations per day: Colonel, \$3.17; lieutenant colonel, \$2.67; major, \$2.34; surgeon, \$2.67; assistant surgeon, \$1.78; adjutant, \$2; quartermaster, \$2; captain, \$2; first lieutenant, \$1.67; second lieutenant, \$1.50; enlisted men, \$1.25; rations, 75 cents.

REVIEW.

On the morning of the 19th the brigade was reviewed by the governor. The regiments were formed in line in the order of their numbers. On the passage of the governor along the front and rear of the line all the regiments were at an order arms except the Fourth, which was, correctly, at carry arms. The men during the passage of the governor were very steady. In passing in review the band preceded instead of following the brigade commander. The distances were properly preserved between companies, though that between front and rear ranks in all was too great. The companies were in excellent alignment. Salutes by officers were rendered in every case, but in many instances they were awkwardly given; few, if any, officers looked toward the reviewing officer, and quite a number of the Third Regiment gave the non-commissioned officer's salute. The general appearance of the brigade was very creditable.

An improvised section of artillery, having two 10-pounder Parrot guns, with handsome horses and new harness, took part in the review.

I would not recommend the equipment of a light battery for State service, as I understand has been recommended and contemplated.

A sham fight took place on the afternoon of the 19th, giving the troops an opportunity for instruction in skirmishing, flanking, &c.

GENERAL REMARKS AND RECOMMENDATIONS.

I would recommend that the brigade be not encamped as such until the regiments have encamped separately at some point in the vicinity of their home stations for a year or two. Ground for the purpose could, in all probability, be gotten free of expense. They should encamp at some point away from the railroad, where it would be inaccessible to visitors. The time prior to camp should be devoted to a thorough preparation

for all the duties of the camp, and when in camp to an earnest effort to perfect themselves in those duties. Particular attention should be given to guard duty and military courtesy, and the camp divested of every appearance of holiday character. The inspector-general and brigade commander should, if possible, be present at each encampment, and an officer of the Regular Army to assist him.

I recommend that when the brigade encamps brigade drill should take place, if at all, only on one day of the encampment. Too much valuable time is devoted to this which could be more profitably employed in other military exercises.

That military courtesy be more strictly required, and that captains be held responsible for the failure of their men to render prescribed courtesies, not only as a mark of respect to their superior officers, but because it is indispensably necessary to proper discipline.

That a pamphlet be published on guard duty, to be placed in the hands of officers and men, and that they be required to make themselves perfectly familiar with its requirements.

That target practice be systematically pursued at home stations, every man being required to reach a certain standard; men who cannot learn to shoot to be discharged.

That "setting up" drill—by which I mean the practice in the "four exercises" in the school of the soldier—should be made a part of the armory instruction (while a company may be well drilled in the manual of arms and company movements, the appearance of the men will not be soldierly); and that officers be instructed in the manual of the sword.

That every officer be subjected to examination after election as a prelude to his appointment.

That all encampments be held where there are no outside attractions, and inaccessible to visitors, whose presence should be discouraged, as, in my opinion, better results would be obtained if the attention of the troops could be given entirely to military work and less to social requirements. If it be deemed best that visitors should have an opportunity to see the troops in camp, one day; say that of the review by the governor, might be named for that purpose.

That it would be of great benefit to the militia if a command of regular troops could be encamped near them, to assist them in acquiring a proper knowledge of and the manner of doing camp duty. The camp should be separate from that of the militia, and solely under the command of the officer in charge of it. I have no doubt the State authorities would set apart a space in the grounds of their encampment for this purpose.

That an inspector of target-practice be appointed, who shall make periodical visits to each command, and see that all orders relating to target practice are carried out.

In concluding my report I would state that Brigadier-General Smith, commanding the brigade, is well qualified for the command. He was present at all drills and ceremonies. His staff was an efficient one, most of the officers having served in the late war.

Governor R. A. Alger was in camp during the whole period of its continuance, and was much interested in all that pertained to it, attending every drill and ceremony, riding about the field and following the movements of the troops. He and his staff were all in service during the late war, and each, with one or two exceptions, was wounded.

To Governor Alger and staff and Brigadier-General Smith and staff I desire to express my thanks for their kind reception and for many acts of courtesy, social and official. It was to me a great pleasure and privilege to meet again so many with whom I had been associated as comrades in the late war.

Very respectfully, your obedient servant,

A. C. M. PENNINGTON,
Bvt. Col., U. S. Army, Major Fourth Artillery.

FORT WADSWORTH, New York Harbor, July 31, 1886.

The ADJUTANT-GENERAL, UNITED STATES ARMY,

Headquarters U. S. Army, Washington, D. C. :

GENERAL: In accordance with paragraph 7, Special Orders No. 115, current series, and letter of instructions, War Department, Adjutant-General's Office, 19th May last, I have the honor to submit the following report in reference to the New Hampshire National Guard while encamped at Concord from June 15 to June 19, inclusive:

Three regiments of infantry, one battery of artillery, and one troop of cavalry formed the brigade which came together under the operations of General Orders No. 3, from brigade headquarters.

The routine of duty was regulated by General Orders No. 8. Camp was prepared and tents pitched on Monday, the 14th, by details from the different commands detached for that purpose. On Tuesday morning the troops arrived and marched through the town to the grounds. On both days it rained incessantly, and I did not go out to camp until Wednesday morning. I witnessed the brigade guard mounting, the battalion, battery, and troop drills of the forenoon and afternoon of that day, and was present at the inspection of the Third Regiment by the inspector-general and at the brigade dress parade of that evening. On Thursday there was the usual brigade guard mounting, after which line was formed and the troops marched to town to participate in the ceremonies attendant upon the unveiling of the Webster statue. They returned to camp about 2.40 p. m., and subsequent rain prevented any further drill or parade for that day. During Thursday I remained in camp. A sanitary inspection was made that morning by me in company with Colonel Cook, the medical director. On Friday there was the usual guard mounting, the battalion, battery, and troop drills for both forenoon and afternoon. I was also present at the inspection of the First and Second Regiments, and witnessed that of the battery and cavalry troops. At 4 p. m. there was an inspection and review of the whole command by the governor of the State. This was followed by a brigade dress parade, and this by separate battalion dress parades of each regiment in turn. I returned to Concord that night. The forenoon of the next day (Saturday) the camp was broken up.

FIELD AND STAFF.

It was readily seen that these departments were filled by thoroughly competent and efficient men. General White, who commands the brigade; General Ayling, the adjutant-general; General Patterson, of the Third Regiment; Colonel Copp, of the Second; Captain Piper, of the artillery; Captain Smith, of the cavalry, and others have honorable war records, and have served in the field in some instances through all grades up to their present positions, and the State feels the benefit of their experience. General Wheeler and Major Russell, of the inspector-general's department, are graduates of the United States Military Academy. The adjutant-general of the State holds his office during good behavior. His position is thus made independent of any political caprice. It is, I think, only in this way that there can be secured for the education of each State guard that unity of plan so much more preferable to a patchwork of tentatives where no project can settle itself into a system and no idea is on trial long enough to establish its value. There must be some fixity of tenure and purpose in order that any labor may return its full reward. The adjutant-general has also devolved upon him the duties of the quartermaster, subsistence, ordnance, and paymaster's departments. The responsibility is his, while assisted by able subordinates in the several branches. The payment of troops is made by check to the regimental paymasters, and by them by check to the captains, who pay their men. All of these officers are bonded. Each private receives \$1.50 per day of actual service. Fifty cents of this is ration money, and each organization secures its subsistence to suit itself. The practical result is a caterer to every company; or where two or more come from the same locality they club together. In one instance I found the same caterer supplying six companies at 25 cents a meal. There was ample provision of good food, and under this system it was of course much better prepared and with far less waste than could otherwise have obtained.

The sanitary welfare of the camp was well looked after. Water is brought on the grounds by connection with the city supply. Trench privies are used, and dry soil sifted over them each day. Temporary frame kitchens, 12 by 24 feet, are put up on the company flanks, and in front of these are the mess-houses, temporary shelters of either wood or canvas. The vicinity of these was generally clean, and all these matters received the careful attention of the medical director. The camp ground is practically owned by the State, under a ninety-nine years' lease; it comprises about 30 acres, and is well located. There are upon it many temporary structures pertaining to its previous occupancy as an agricultural fair ground, which come in very handily for stabling, &c. The camp hospital was duly provided with *personnel* and *matériel* for such contingencies as were likely to occur. A permanent building of brick has been erected by the State near the main entrance, and is used as a general store-room and a guard-house.

DISCIPLINE AND INSTRUCTION.

Of the appearance of the infantry under the close observation of regimental inspector, I could only say that it was fair. The rigidity in ranks and the impassive demeanor that are supposed to characterize regular troops were not to be expected; but neither is there any excuse for such general neglect of these points. Each company has an armory, where squad drill is practicable and should be required, and military education should no more begin with brigade maneuvers than mathematical with differential

co-efficients. Details of position and carriage will certainly shape the estimate that observation forms of all troops, rather than the possible possession by them of other and higher qualities which the stress of actual service might develop. *Eyes to the front, mouth shut, heels together, and ears open* make the foundation on which the man in the ranks must build, if he is to have any military standing whatever, and without these indices of his training he will never look like a soldier, however much he may feel like being one. The most important of all acquisitions (self-control) begins right here, where a man is taught to cover his own front only and leave the rest of the horizon to his neighbors. While the interest and sympathy of spectators should not be to summarily repressed, space for the inspections should, it seems to me, be so secured that the inspector need not be incommoded by the crowd; and a suitable margin should be set off for a frame-work to the battalion, that it may not be actually merged among the on-lookers.

The drilling was good. The brigade was skillfully handled by its chief, both at the ordinary exercises and in the formations precedent to Thursday's march into town. The field officers, particularly the colonels, exercised their commands freely through the school of the battalion, and were, as might have been expected, thoroughly at home in the tactics. Many of the company officers were inexperienced, and it could not be otherwise, since the companies belong to separate towns, and can only be gotten together during the five days' encampment. The greatest need of the men is a thorough setting up in elementary principles, which is perfectly practicable at their company armories. A persistent application of the first thirty pages of tactics would be worth more than all the rest of the volume.

The parades were good. Individual defects were somewhat covered in the mass, and lost from a longer range of observation. Officers and non-commissioned officers, as a general thing, were well posted in these matters of ceremony. The brigade presented a fine appearance on the review. Alignments, wheelings, and distances were well executed and preserved; in fact, what trouble there is lies just here not so much in absolute ignorance of details as in the concentration of all effort upon these grand occasions rather than upon the common daily work. It is natural, perhaps, to expect that the presence of the governor, the throng of spectators, and the resounding music should enable a man to march, wheel, and dress most beautifully; but it must not be forgotten that all this has about as much relation to his real business as a tulip to a torpedo. These spectacles, however, have their value in more ways than one. They not only present the glitter of the gold lace, but the gleam of the bayonet also. The padded coat may be there, but the cartridge-box is behind it, and contains at least an inference or two that the dullest mind may draw. The battalion movements were mostly in the closed formations.

There was some skirmish drill but no target practice, and no blank-cartridge practice. Skirmishing and the fire exercise are, I think, of the utmost importance, and might well monopolize the time to the exclusion of more dramatic exhibits. There is some difficulty in securing ranges at the company armories and vicinity, and the scant State appropriation, from twenty to twenty-five thousand dollars yearly, limits the ammunition supply. General Orders, Nos. 1 and 4, this year's date, show that a beginning has been made in the matter of target practice from which good results may be expected.

Guard duty was performed reasonably well. There was hardly time to witness the results of the instruction given and the care exercised, of which there was no lack.

The light battery (four light twelves, piece and caisson, four horses to each) is now entirely a Manchester organization, with teams from the same locality. It is in most excellent condition, both as regards drill, discipline, and material. The manual of the piece was performed with a precision and yet entire freedom from awkwardness very desirable to secure and very seldom seen. The battery was freely exercised throughout the various tactical movements, showing a remarkable knowledge of the entire school, and reflecting great credit upon Captain Piper and all concerned. The carriage of the men, both on drill and on guard, showed the beneficial results of close and efficient supervision and instruction, reaching into details of duty and behavior that mark the true soldier and grow out of armory work done as it ought to be done. Everything about the battery, implements, equipments, harness, &c., testified to thorough care and a knowledge to which the war experience of Captain Piper no doubt contributed, but which pertains originally to a love of and a fitness for artillery service.

I was also very agreeably disappointed in the appearance and efficiency of the cavalry troops. The horsemanship and drill of the men was of a very superior nature to that of such organizations generally, and forms a sufficient reason for the continued existence of this particular troop. The troop is wholly from Peterborough, and is, I fancy, largely leavened with something more than traditions of the war service. It was well commanded and handled, and much of its competency is due to the fact that each man owns the horse he rides instead of getting a casual introduction to him for the first time on the occasion of his use.

ARMS, CLOTHING, CAMP AND GARRISON EQUIPAGE.

The infantry was armed with the Springfield rifle, caliber .45, enameled leather belt, block cartridge-box, and steel bayonet scabbard, all in good condition. Each man has a knapsack, which might be dispensed with; but I saw no haversacks or canteens, which are indispensable. The uniform, or the coat at least, belongs to days and notions that are dead and gone, being of the old swallow-tailed pattern, turned up with red, white, and blue for the different regiments. It has no excuse for existence except possibly the cost of substitution. The felt dress caps are in process of replacement by helmets. Most of the men had overcoats, but each, I imagine, furnishes his own blanket. The State should provide a substantial blouse in lieu of the present coat, and leave each organization, at its own expense, to select any superfluous and picturesque adornment in the way of "full dress" which holiday parades and company *esprit* might justify. The officers, with but a few exceptions, wore the United States Army uniform belonging to their rank. The supply of canvas was most ample and in very good condition. The tent floors are furnished by the occupants of the tents.

ATTENDANCE AND MISCELLANEOUS.

The morning report of the 17th of June (furnished me by the politeness of Colonel Gould, assistant adjutant-general) shows strength as follows:

Troops.	Present.		Total present and absent.	
	Officers.	Men.	Officers.	Men.
First Regiment.....	31	272	32	341
Second Regiment.....	31	268	33	358
Third Regiment.....	31	288	32	392

Each battalion contains eight companies, giving a company average present in camp of about thirty-four enlisted men. About from 35 to 40 per cent. of the infantry drop out and are renewed between the successive yearly encampments. In the artillery and cavalry this percentage is much less. The light battery shows strength, present, 4 officers and 66 enlisted men; absent, 2 enlisted men. For the cavalry troop the figures are, present, 3 officers and 48 enlisted men; absent, 1 enlisted man.

The regimental organization provides for colonel, lieutenant-colonel, major, adjutant, quartermaster, paymaster, surgeon, assistant surgeon, and chaplain. The non-commissioned staff comprises sergeant-major, quartermaster sergeant, commissary sergeant, hospital steward, drum major, bandmaster, and deputy bandmaster. Each of the regiments has its own band of enlisted men, like those in front of whom they march, where inspiration is not so much the hire they get as interest in the work they do. The arrangement is, I think, a very commendable one, and does away with the absurdly profuse outlay for operatic complications sometimes indulged in. I notice in General Orders, No. 5, the bandmaster and field music are directed "in practicing music for parades and field purposes to observe the new cadence in quick time, being at the rate of one hundred and twenty steps per minute," and this was specially looked after.

Under the operation of Special Orders, No. 1, special provision is made for the instruction and information of officers and non-commissioned officers by recitations and papers, and those prepared under the heads of "Conduct of officers and men in armories," "The requisites of a good officer," "Care and use of arms," and "The moral value of military discipline," cover topics most valuable for discussion and research by officers of the National Guard.

Generally, I may sum up the whole matter by saying that, with the exceptions already noted, General White and his staff could, undoubtedly, put this brigade in good order and well supplied for service into the field at reasonable notice prepared for any emergency, domestic or otherwise. A suitable store of ammunition, I am informed, is provided at points where it can readily be made available.

The order prescribes but a five days' encampment, and half of this time was lost through unfavorable weather, but the benefit even so is great, positive, and enduring.

It would be very ungracious to omit a proper and deserved acknowledgment of the many courtesies extended me by Generals White, Ayling, and Wheeler, Colonel Cook, Majors Russell and Donovan, and Captain Thompson, to all of whom I am indebted for many most pleasant recollections.

HENRY W. CLOSSON,
Lieutenant-Colonel Fifth Artillery.

FORT TOTTEN, DAK., July 2, 1886.

The ADJUTANT-GENERAL UNITED STATES ARMY,

Washington, D. C.:

SIR: I have the honor to submit the following report of my inspection of the Second Regiment of Infantry, the Luverne Guards, and Saint Paul Troop of Cavalry, being that part of the National Guard of the State of Minnesota encamped near New Ulm, Minn., from the 23d to the 27th of June last, made in compliance with paragraph 2, Special Orders No. 137, current series, from your office:

I reached New Ulm, Minn., on the morning of June 23, the day appointed for the rendezvous of the designated troops, who arrived by rail during the same afternoon, and marched in good order to their camp, making a most favorable impression by their military bearing. Camp Hubbard, named in honor of the chief executive of the State, was located a short distance west of New Ulm, on a beautiful plateau rising from the south side of the Minnesota River, and presented all that could be required in a camp of instruction, the grounds being ample for the bivouac and maneuvers of a brigade or division. The drainage was natural; water of good quality supplied by windmill, and distributed through iron pipes and hydrants to each company kitchen; separate sinks for officers and men were prepared at suitable distances and housed; and at regular intervals posts were erected supporting lamps, giving all necessary illumination at night. Before the arrival of the troops the tents had been pitched by the New Ulm company and detachments under the supervision of the colonel and lieutenant-colonel. They consisted entirely of wall-tents, without flies, the property of the State, and were arranged in column of companies, as provided in tactics, except the company kitchens and mess place. Hospital-tent flies were placed in rear of the line of field and staff officers' tents. Temporary sheds were built as cover for cavalry and artillery horses. The guard-tents were placed at one angle of the square embracing the camp, and near by was erected a pavilion, divided into an officers' mess-room and trader's store.

I was most courteously received by the commanding officer, Col. Joseph Bobleter, of the Second Regiment, and through him soon became acquainted with all of his officers, and remained with them from the first to the last day of their encampment, observing closely every detail and routine of duty.

CONSOLIDATED MORNING REPORT.

The following table shows the strength of the command on the 29th of June, being a fair statement for each day of the encampment:

Troops.	Present.		Absent.		Total present and absent.		Aggregate.
	Officers.	Men.	Officers.	Men.	Officers.	Men.	
Field, staff, and band.....	9	22	2	6	11	28	39
Second Regiment.....	24	369	6	131	30	500	530
Luverne Guards.....	2	13	1	13	3	26	29
Cavalry troop.....	2	17			2	17	19
Total.....	37	421	9	150	46	571	617

REGULAR TROOPS.

Light Battery F, Fourth Artillery, Captain Frank G. Smith commanding, arrived from Fort Snelling June 22, encamped near the left flank of the State troops, and participated with them on occasions of ceremony. The drills and splendid appearance of this battery was a source of special admiration and satisfaction to the entire cantonment.

ORGANIZATION.

The Second Regiment of Infantry is organized on the basis of ten companies, the same number of field, staff, and company officers as are allowed a regiment of infantry in the United States Army, with the addition of the following staff officers, viz: a commissary of subsistence, an inspector of rifle practice, and a judge-advocate, each having the rank of first lieutenant.

The Luverne Guards, designated the reserve company of the Second Regiment, is a new and skeleton organization, as yet total strangers to tactics, and armed with the obsolete Springfield breech-loading rifles, caliber .50.

The Saint Paul Troop of Cavalry appeared also to be of recent origin, and was represented by two officers and fifteen enlisted men, mounted on farm horses hired in the neighborhood. The time allotted was too short for them to become familiar with the saddle. Captain Markal deserves credit for the energy he displayed for the benefit of his troop.

ARMS.

The infantry were armed with Springfield breech-loading rifles, caliber .45, except the Luverne Guards, heretofore described. A large number of the rifles have been supplied with the last improved sights, and there were many old guns without the safety-notch and badly worn, which should be exchanged for serviceable rifles.

The cavalry were well armed with the Springfield breech-loading carbine and sabers.

EQUIPMENT.

The infantry reached camp with new waist-belts and plates, steel bayonet-scarbards, and the McKeever cartridge-boxes; also, new blanket-bags. Each company had been supplied with tin canteens, but none had haversacks. To be prepared for active service, these latter articles are absolutely essential, and each man should be supplied, and I would respectfully invite attention to this deficit.

The cavalry troop were equipped with the saber, belt and plate, McKeever cartridge-box, and carbine sling and swivel, but nothing worthy the name of horse equipments.

It appears that the State possesses but sufficient tentage to cover one full regiment, and must transport this from place to place as required. I believe it would prove a measure of economy to supply each regiment with their own tents, and would certainly add to the efficiency of the troops should they be called out.

Each company of the Second Regiment owns a complete messing outfit, including cooking-stove, necessary utensils, and table ware.

CLOTHING.

The infantry uniforms, both dress and fatigue, were similar in color and design to that prescribed for that arm in the regular service, well cared for and satisfactory. Shoes and underwear according to individual tastes.

The cavalry uniform was somewhat more gaudy and expensive, but generally appropriate.

SUPPLIES.

Each company commander subsisted his own company with the per diem allowed by the State to each man while in camp, viz, \$1.50. The purchases were made by a non-commissioned officer, and cooks hired. The plan seemed to give entire satisfaction, but left the regimental commissary of subsistence without occupation. Wood and ice abundantly supplied, and, I think, donated.

MEDICAL DEPARTMENT.

The medical department, as conducted by the surgeon and assistant surgeon (Doctors B. G. Berry and D. B. Collins), was all that could be desired. I believe the medicines used were furnished by the medical officers.

INSTRUCTION.

Upon the arrival of the troops printed orders were distributed announcing the daily routine of the command, in which nearly every hour of daylight was utilized for purposes of instruction. Daily at 2 o'clock p. m. the officers were assembled at the quarters of the commanding officer and given theoretical instruction in infantry tactics and customs of service. By request of the colonel commanding I attended this call and joined fully in all discussions. On these occasions the officers generally evinced a military spirit and desire to learn, and questions indicated that a few of them had given the subject much attention.

If captains could be induced to conduct regular tactical recitations at their armories, they would find not only their companies but themselves greatly benefited. Many of

the lieutenants seemed imperfectly acquainted with their duties, either in guard duty, ceremonies, or as file-closers. The company school recommended would go far toward remedying this defect.

GUARD DUTY.

To enable each officer and enlisted man to perform a tour of guard duty, the guard was relieved every twelve hours, full-dress guard-mounting being had each morning and immediately after sunset; captains taking turn as officer of the day, and two lieutenants going on as senior and junior officers of the guard. The guard duty was performed faithfully, and as correctly as could have been expected from troops unaccustomed to such requirements, an improvement being observed daily.

Should the National Guard be called to active service, their first duty would be that of guard, and it is recommended that the strictest attention be given this subject by all concerned. Captains could soon render their men familiar with the duty by including it as part of their armory instruction.

DRILLS.

Battalion drill was held each morning, Sunday excepted, from 6.40 to 8.40 o'clock. While company commanders were not proficient, they made remarkable progress, and before breaking camp went through all open column movements prescribed in the school of the battalion with much credit to themselves and their colonel, who labored intelligently and unceasingly in their behalf. When the fact is recalled that the companies of the Second Regiment are scattered throughout the State, and never exercised as a battalion except at the annual encampment of a week, their recent performance in battalion movement was surprising, especially in their marching in column of companies.

Company drill was had one hour daily. I would recommend that during the encampment week this be dispensed with, substituting therefor battalion skirmish drill, dividing the regiment for this purpose into two battalions under the lieutenant-colonel and major, respectively. They can reach proficiency in company drill at their armories, as shown by Captain De Witt in a most attractive and spirited exhibition drill with his company (K).

Company skirmish drill does not seem to have received the attention its great importance demands.

REVIEWS AND PARADES.

Review and dress parade occurred each afternoon, Major Smith, Fourth Artillery, or myself acting, by invitation, as reviewing officer. They were properly conducted, though on one or two occasions somewhat marred by the inexperience of the adjutant, a most worthy gentleman, but young soldier. The command always presented a handsome, soldierly appearance.

On Monday, the 28th, his excellency the governor visited the camp officially, being escorted by the entire command, including Light Battery F. His reception was most enthusiastic, as was to be expected when it is remembered that he is the founder of the present efficient organization of the State National Guard. At the review in his honor I had the pleasure of acting upon his staff, and wish now to express my high appreciation for courtesies at his hands.

SHAM BATTLE.

A sham battle occurred Tuesday, June 29, before a large assemblage of people, and was entirely successful, the attacking party, commanded by Colonel Bobleter, consisting of Light Battery F, Fourth Artillery, seven companies of infantry, and the Saint Paul Troop of Cavalry, with Lieutenant Colonel Mead commanding; one piece of artillery and three companies of infantry on the defensive. The skirmishing was good, and the control of the men during the excitement attending the mimic conflict was excellent.

DISCIPLINE.

Good order and cheerful obedience was a marked and pleasant feature of the encampment. Rigid discipline would have been out of place, the men appearing to do their best, except in the matter of military courtesy, which was very slack regarding enlisted men saluting officers. With ample opportunities I saw not one officer or soldier under the influence of liquor. I, however, believe the line between company officers and enlisted men should be more distinctly drawn. The *personnel* of the command is very fine, and I am sure the men themselves would readily appreciate efforts of their officers to maintain properly their rank and office.

POLICE OF CAMP.

The police of camp was in charge of Major G. S. Ives, and was thorough.

TARGET PRACTICE.

The range for this purpose at 100, 200, 300, and 500 yards was very good. Practice was had under the supervision of the inspector of rifle practice, First Lieut. E. W. Bird, according to regulations promulgated from the adjutant-general's office of the State of Minnesota. Much interest in the subject was manifested, and as high a state of excellence attained as possible in a single practice week; the conditions differing from those laid down in Blunt's Rifle and Carbine Firing, no comparison could be made between the shooting of these troops and those of the Army.

INSPECTION.

At the request of the commanding officer I made a minute inspection of his entire command, occupying about three hours. The inspection was preceded by a review. As a rule the companies have not been regularly inspected by their company commanders, and in consequence many of the officers and men were awkward in performing their parts. The rifles, though serviceable, were not in the condition one would naturally expect from so good a regiment. Company officers should give this subject more attention, and impress upon their men the importance of properly caring for their arms and equipments by having formal company inspections at least monthly, and reporting result to regimental headquarters. The equipments were properly adjusted. The camp was thoroughly policed, and the tents neatly arranged and bedding properly folded.

BOOKS AND PAPERS.

Company and consolidated morning reports were rendered daily on blanks. No regimental or company record books have been furnished the command. The regiment being a permanent organization, certain books, such as regimental and company descriptive books, morning report books, guard report books, and letters sent and received books, should be supplied, that an accurate history may be preserved.

I beg leave to express my sincere obligations to Colonel Bobleter and the officers of his command for polite and hospitable treatment.

Very respectfully, your obedient servant,

JNO. M. BACON,
Major Seventh Cavalry.

FORT TOTTEN, DAK., *July 17, 1886.*

The ADJUTANT-GENERAL UNITED STATES ARMY,
Washington, D. C.:

SIR: In compliance with paragraph 2, Special Orders No. 137, current series, from your office, I have the honor to make the following report of my inspection of the First Regiment of Infantry and Emmett Light Artillery, Minnesota National Guard, at White Bear Lake, Minn., between July 7 and 14 instant:

Arriving at White Bear Lake in the afternoon of July 7, I found the designated troops had reached camp during the morning, and were prepared for the critical inspection of their tents and mess arrangements, which was at once made by the officer of the day, regimental surgeon, and myself.

Camp Ruger (so called in honor of General Thomas H. Ruger, U. S. Army), situated a short distance from the railroad station at White Bear Lake, was not well adapted for the establishment of a camp of instruction, the drill and parade ground being contracted and uneven. The tents were those used at Camp Hubbard, and arranged in a similar manner, except that in place of the hospital-tent flies used for company messes, each company of the First Regiment owned a spacious, rather ornamental tent for that purpose, adding much to the comfort of the men. I had previously met Colonel W. B. Bend, the commanding officer, and a number of his officers, and desire now to express to them my high appreciation for most hospitable and courteous attentions.

CONSOLIDATED MORNING REPORT.

The following statement shows the average strength of the command during the encampment:

Troops.	Present.		Absent.		Total present and absent.		Aggregate.
	Officers.	Men.	Officers.	Men.	Officers.	Men.	
Field, staff, and band.....	8	26	3	1	11	27	38
First Regiment.....	25	376	5	147	30	523	553
Light Artillery.....	2	32	1	21	3	53	56
Total.....	35	434	9	169	44	603	647

ORGANIZATION, ARMS, EQUIPMENT, ETC.

The organization, arms, equipment, clothing, supplies, and medical department of the First and Second Regiments being identical, the remarks and recommendations made in my report of the 2d instant pertain equally to each regiment. I repeat my recommendation that the men be supplied canteens and haversacks, and also blankets.

The Emmett Light Artillery was organized in 1881, and consists of one captain, two lieutenants, fifty-three men, present and absent, and two brass 6-pounder field-pieces and caissons. The men were armed with the saber, and the battery fully equipped and with harness for sixteen horses. Horses used were hired for the encampment.

INSTRUCTION.

The routine of duty announced in general orders by the commanding officer was calculated to produce the best results. It could only have been improved by giving some attention to battalion skirmish drill. At the officers' school, held daily, the familiarity exhibited by many of them with infantry tactics and customs of service was notable, and convinces me that the regular recitations held by most of the captains in their armories has been most profitable.

GUARD DUTY.

The full-dress guard mounting at 8 a. m. and sunset was tactically correct, and in which every line officer and enlisted man of the First Regiment participated. While perfection was not to be expected, the officers and men were zealous in their performance of the duty, anxious to learn and ready to instruct. The details of the duty would be impressed on the officers if they were required to submit brief written reports of the instructions they have received and given during their respective tours.

DRILLS.

From the reputation of the First Regiment, I was prepared to see some excellent drilling, and was not disappointed. The company drill of Capt. E. S. Bean's company (D) was the perfection of military precision, and could only have been acquired by enthusiasm and regular and intelligent instruction. His company did not go through the bayonet exercise, but was well instructed as skirmishers. Company drill was not a part of the programme ordered for the encampment, nor would I advise it, except it be skirmish drill; hence I did not see another, but, judging from the military *esprit* and high order of intelligence of the captains, I conclude that all the companies were proficient.

At the battalion drill, had each morning from 5.30 to 7.15 o'clock, the commands were properly given and explained by the colonel or major, and every movement prescribed in the school of the battalion creditably executed. The few mistakes noticed were not repeated, except that of the company commanders at times improperly repeating the commands of the colonel. On battalion drill I observed many men excused, including the new guard details, and that each company appeared with three sets of fours, besides file-closers—a convenient and rather æsthetic formation, that should have been sacrificed

in the interest of instruction by requiring the presence of all not actually engaged on other duty.

The drill of the Emmett Light Battery was most creditable, and showed careful instruction.

REVIEW AND PARADES.

The review and parades were conducted daily and in the most approved manner; the errors were those liable to occur with a command in constant practice.

DISCIPLINE.

It would be difficult to find a body of young men superior to those representing the First Regiment. They exhibited the desired military spirit and much regimental pride, performing every duty required with alacrity and to the best of their ability. Roll-calls were regularly attended, and, excepting occasional skylarking, order was maintained after taps. Military courtesy was, with few exceptions, fairly well observed. Strict discipline could not have been established in so short a time, or was such necessary. Less social intercourse between the company officers and their men when on duty in a camp of instruction is recommended, notwithstanding their relations elsewhere.

TARGET PRACTICE.

The rifle-range, though the best that could be obtained in the neighborhood, was over a marsh, and not good. The practice was conducted by the regimental inspector of rifle practice, First Lieut. C. M. Skinner, being at the same distances and under the same rules as those governing at Camp Hubbard. Officers and men evinced a commendable zeal in this duty, and made a most creditable record.

INSPECTION.

By invitation of the commanding officer I made a close inspection of the troops and camp on Sunday, the 11th instant. At the review preceding the inspection the marching and wheeling of the companies, both in regard to the cadence of the step and alignments was very good. Company commanders reported having regular monthly inspections in their companies, except company G, which was had every two months. In all the companies save B, H, and K, recitations in tactics were regularly conducted. I found both officers and men properly instructed in the duty of inspection, and the rifles and equipments in very good condition. Many of the guns are of the old pattern, without the safety-notch, and showing signs of age and decay. Those should be exchanged for new rifles. The camp was in a thorough state of police, and tents neatly arranged, with folded bedding and gun-racks. The harness of the Emmett Light Artillery, while serviceable, was old and in need of cleaning and repair. The guns, carriages, and caissons were in good condition.

BOOKS AND PAPERS.

Both the regimental and company commanders appear to have given this subject close attention. Those of the regiment were inspected during the week and found completed to date, and in good order. Company commanders made a similar report of their company records, which were left back at their armories.

Having now completed the duty assigned me, I beg, in conclusion, to bear testimony to the efficiency and soldierly bearing of both officers and men of the Minnesota National Guard. Any State or nation would have reason to be especially proud of two such organizations as the First and Second Regiments of Infantry. They are an honor to their great State, and deserve its liberality and encouragement. It requires time, labor, and money to make good soldiers, and it would seem but reasonable that if the guardsmen furnish the first two requisites, the State could well afford to aid them with the latter, and provide them a permanent camp, uniforms, blankets, and sufficient pay to insure them against actual loss during their encampments or when legally called out for any purpose.

Very respectfully, your obedient servant,

JNO. M. BACON,
Major Seventh Cavalry.

FORT LEAVENWORTH, KANS., *July 27, 1886.*

THE ADJUTANT-GENERAL UNITED STATES ARMY,
Washington, D. C. :

SIR: I have the honor to submit the following report of my inspection of an encampment of the Missouri militia, at Sweet Springs, Missouri, which I visited during its continuance from July 12 to 17, 1886, agreeably to paragraph 16, Special Orders No. 123, current series, Headquarters of the Army:

I arrived at Sweet Springs, a watering place and summer resort of some note, situated a mile west of Breunsville, a station on the Lexington branch of the Missouri Pacific Railway, late on the evening of July 11, and on the following morning reported in person to the adjutant-general of the State, Brigadier-General J. C. Jamison, whom I found in camp (called Marmaduke), which had been already established in part. Here I also met his excellency, Governor John S. Marmaduke, as well as the inspector-general of the State forces, Col. William Bull. The latter, who had laid out the camp, was in temporary command during the 12th, but on the following day General Jamison assumed the command, having, in the absence of a general officer, been assigned thereto by the commander-in-chief. The First Infantry, a detachment each of Troop A of Cavalry and of Battery A of Light Artillery, all from Saint Louis, and the Fifth Infantry, from the southwestern portion of the State, were already on the ground. In the course of the afternoon the Third and Seventh Infantry arrived from Kansas City. The Second Infantry, composed of companies from the northwest part of the State, did not reach camp until the evening of the 13th, two companies remaining but two days.

The following table shows the average attendance in camp from July 12 to 17:

Organizations.	Present.					Officers and men absent.	Aggregate.	Percentage of officers and men absent.
	No. of companies.	Officers.	Non-commissioned officers.	Privates, including musicians.	Total.			
First Infantry*	8	17	33	111	161	386	547	70.57
Second Infantry	5	14	23	63	105	334	439	76.08
Third Infantry†	5	16	24	80	120			
Fifth Infantry†	7	22	40	131	193			
Seventh Infantry†	5	17	28	63	113	102	215	47.44
Troop A, Saint Louis Light Cavalry	1	2	4	13	19	28	47	59.57
Battery A, Saint Louis Light Artillery	1	1	3	6	10	38	48	79.17
Total	32	89	155	477	721			

*Company B, 45 men strong, was not represented at encampment.

†Reliable data respecting the absentees of these organizations were not obtainable.

‡Companies A and B, numbering 40 and 42, respectively, did not attend encampment.

The camp we located within a circular race-track, occupying a nearly central position, and about a third of the space in an inclosure of 37 acres used as fair grounds, about 450 yards to the south of a spring, near which a hotel and a number of cottages and buildings appurtenant to it are grouped, the whole called Sweet Springs. The camp headquarters, contained in a single marquee, stood near the center of this circular piece of ground, facing an open space, large enough for the mounting of a guard, to the north. On the right or east flank were the tents of the second, and on the opposite side those of the first infantry and of the artillery detachment. The rows of tents of the Fifth, Seventh and Third Regiments, arranged from east to west in the order named, stood immediately in rear or south of the headquarter tent. The tents of the cavalry troop were the only ones without the race-track. They were placed to the south of it in a shady grove, accessible to good stabling.

The ground bounded by the track scarcely afforded sufficient room for a camp of this kind, the flank row of the tents of one regiment being within a few yards of the outer row of those of another, and a few feet only separating the officers' from the men's tents.

Outside the track, and within the inclosure, the ground was more or less wooded, except in the northeast corner, where there were no trees. The drilling took place mainly in this part of the inclosure, though as the space even here was limited, accommo-

dating not more than two small battalions at a time, and as the ground, in places at least, was rough, many companies preferred to drill in front of the hotel, the disadvantage of obstacles in the shape of trees, chairs, and benches being apparently outweighed by the smoothness of the ground's surface there and by the applause from spectators, by which every well-executed movement was rewarded.

OBJECT OF THE ENCAMPMENT, AND HOW THE EXPENSE ATTENDING IT WAS MET.

Although some regiments or lesser organizations had gone into camp in former years, this was the first general encampment the National Guard of Missouri had ever held. In the absence of any aid or encouragement from the State, it had not been deemed feasible to assemble all or the bulk of the troops. Though frequently pressed to do so, the legislature has hitherto persistently failed to make suitable provision for the militia. It being fair to presume that this action, or rather non-action, of the legislators represented the sentiment of their constituents, founded upon some supposed or real state of things, the conclusion was reached that the unwillingness to make any appropriation from the Treasury for the reasonable needs of the State service arose from the opinion that the motive of the average man joining this service was a desire to display a gorgeous uniform and to have a "good time," rather than to fit himself for the serious work of the profession of arms and for the task of protecting the people in their persons and property, should the occasion require such protection. It was to dispel this widely-prevalent opinion that men impressed with the necessity for an efficient militia system, such as has been perfected in other States in recent years, planned and brought about this encampment. If, reasoned these well-wishers of the militia, foremost among whom may be mentioned the present governor, himself a soldier by education and training, it can hereafter be shown to the voters that respect for authority was inculcated and enforced; that excesses were refrained from; in short, that good discipline was maintained in camp, and that satisfactory progress was made in learning whatever pertains to a soldier's life and duties in active service, the prejudice against the militia will disappear and the State purse-strings may be loosened in its behalf. As the governor could not lawfully issue, without legislative warrant, any order upon which a claim against the State might be based, he *permitted* but did not *direct* the troops to rendezvous at Sweet Springs, and the means for defraying the expenses of the encampment had to be raised from private sources. All the organizations taking part in it accordingly contributed at the rate of \$5 for every member present to a common fund, of which the adjutant-general became the custodian and disbursing agent. This fund, supplemented by about \$1,300, the proceeds from the sale of tickets for admission to the inclosed ground on the day on which a sham fight took place, proved more than sufficient to cover all expenses. The chief items of expense were: (1) For rent of the equipage required during the encampment, and of which the State possesses none, amounting to \$801.50, the equipage consisting of two hospital-tents (14 by 21), thirteen wall-tents (12 by 14), two hundred and thirty-eight wall-tents (10 by 12), six hundred camp-stools, twelve cots, and one thousand bed-sacks; (2) on account of subsistence; and (3) for transporting the troops to and from the camp—a service which was performed gratuitously by the Missouri Pacific Railway Company, though not, perhaps, without the expectation of increased travel likely to be attracted by the extensively advertised sham battle and of consequent indirect compensation, other roads, not counting upon such incidental benefit, charging one cent and in some cases two cents per mile per man.

INSTRUCTION.

On the evening of the 12th I witnessed the mounting, for practice, of a guard by the Fifth Infantry, the adjutant showing a good knowledge of his duties. In the evening the same regiment, which was the largest and, perhaps, all things considered, the best disciplined in camp, held a dress parade at which I was present. Several companies of different regiments engaged in company drill at various hours, but there seemed to be no other military exercises on that day.

On the following morning all the organizations that had arrived save the artillery detachment, which fired a salute where its guns were parked, formed in a field about half a mile distant from camp for a review according to the principles of the review of a brigade by the governor, whom I was invited to attend, and who was escorted by the cavalry troop. The troops, under the command of General Jamison, wore fatigue dress, and on the whole presented a very creditable appearance. The following errors were observed and are noted to prevent their repetition: The colonels took post at much less than the prescribed distance from the center of their respective battalions and failed (all except one) to cause them to stand at parade rest while the reviewing officer, in passing around, was

not in their immediate front or rear. At this time many officers and the colors of several regiments saluted instead of standing steady. After the line had been broken into column of companies the colonels did not in every case command "Right shoulder arms," an omission that must have greatly taxed the strength of men unaccustomed to hold their pieces for a long time at a carry. A camp color was not established in time to mark the point where each battalion was to be brought to carry before passing the reviewing officer, nor, while so passing, did the colonels occupy their proper positions. Distances were lost in several instances, and the salutes of officers and non-commissioned staff officers were as a rule badly executed where they were not wholly omitted.

No drills were ordered from camp headquarters, although a few company drills took place on the 13th, the day being very hot. A parade, conducted according to the principles of the dress parade of a battalion, in which two battalions took part, closed the exercises of the day.

Battalion drill was ordered for the morning of the 14th, and I witnessed the drills of the Fifth and Seventh Regiments, commanded by Colonel Allen and Major Pease, and composed of seven and three companies, respectively. Both regiments showed the need of instruction of this kind, especially the seventh, which has been quite recently organized. Violations of tactical rules, and the reasons which rendered an observance of them imperative, were pointed out as far as practicable. The usual guard mounting and dress parades also took place.

The afternoon of the 14th and the entire day of the 15th were mainly occupied in preparing for and in executing the sham fight that has already been referred to. Some occasion on which the noise, confusion, and excitement, if not the more ghastly scenes, of a battle can be imitated seems to be deemed an indispensable concomitant of a militia encampment, and the desire to have the simulation take place, which is as universal among the soldiers as among the spectators, is not easily repressed. As the troops are new and not readily controlled when laboring under excitement, and as one of the chief objects is to amuse the crowd, military principles which should be conformed to at such times must of necessity be disregarded in great part. Anxious to avoid the trouble and the serious, sometimes fatal, accidents which are not uncommon to such occasions, the governor directed that the feigned combat should be of the most simple character, and that the plan, which was accordingly agreed upon by the several regimental commanders, should be reduced to writing for careful perusal by officers of all grades, to guard against all possible misunderstanding. This plan fixed not only the original positions of the several bodies constituting the attacking force, ultimately to be victorious, but also prescribed a well-defined line beyond at which the supply of blank cartridges of this force was to be wholly expended, and still another equally well-marked line, which, upon being reached by the troops of the same side, should serve as a signal to the force on the defensive to precipitately abandon the supposititious parapet (made of brush) which was to screen it. Thanks to this wise precaution and to the determination of the officers not to deviate from the programme, as well as to the unhesitating obedience of the men, no serious casualty marred the simulated fight, which proved highly entertaining to the spectators and a source of friendly chaffing as well as of revenue to the officers and men engaged in it. But that it contributed much to the instruction of the latter is very doubtful.

Four companies of the First Infantry, under Major Comfort, had a battalion drill on the evening of the 16th, which, though not altogether faultless, showed that this part of the regiment had had excellent training in the school of the battalion.

The hours and places at which company drills took place were so various that I am not sure of having seen every company drill, though during my entire stay I did not intentionally miss an opportunity to observe a drill or a ceremony of any kind. I was impressed with the fact that, as a rule, the companies, as such, drilled well. In the manual especially some of them were marvelously perfect. The companies of Captain William K. Chaffee, of the Fifth, and of Captain Perkins, of the Third Infantry, excelled in this drill all others that came under my observation. The performance of the cavalry troop, Lieutenant Abadie commanding, though composed of only three sets of fours, was also very satisfactory.

It is a cause for regret that no attention was or could be given to battalion skirmish drill or target practice, exercises which probably more than any others are indispensable to the training of troops for active service.

The guard mountings and parades witnessed by me, while showing a noticeable improvement toward the end of the encampment, especially in the case of the Seventh Regiment, left much to be desired, irregularities and errors, which were always pointed out when practicable, being mainly ascribable to the inexperience of the officers, who, though they had read their tactics, lacked that confidence in themselves which can be gained only by practice.

GUARD DUTY AND DISCIPLINE.

A guard, consisting of two officers and forty-five privates, with a proper complement of non-commissioned officers, drawn from the infantry regiments, under the supervision of a captain as officer of the day, who reported to General Jamison, was mounted daily, and furnished a cordon of fifteen sentinels around the inner side of the race-track encompassing the camp. As usual, officers and men displayed at first considerable ignorance and awkwardness in performing guard duty, but its importance seemed to be recognized, and considerable pains was taken to disseminate knowledge with respect to it by means of pamphlets on the subject which were distributed, as well as by oral instruction of the sentinels. There was in consequence a fair improvement noticeable; but instruction in this branch of a soldier's duty would have been more widely diffused and the ends of discipline could have been promoted had the contracted space allotted to the camp admitted of the maintenance of regimental guards. Each colonel ought to be charged with the preservation of order, peace, and quiet within his command, and the means that should be placed in his hands for the accomplishment of this end is the police guard. During a portion of at least two nights of the encampment the noise caused by the firing of blank cartridges and loud yells was such as to render sleep impossible, and the attempts of the camp guard to suppress this uproar proved utterly futile. These disturbances did not proceed from vicious traits or drunkenness, but from the exuberant spirits of a multitude of young men suddenly brought together, and might, and doubtless would, have been easily checked by regimental guards, had there been any.

It affords me pleasure to say that, despite these occasional infractions of camp regulations, the conduct of the command, almost to a man, was worthy of high praise. Exposed, as they were, to every temptation, as well as to the great fatigue (aggravated by extraordinary heat) resulting from exercises and duties to which they were unaccustomed, cases of drunkenness and insubordination were nevertheless so few as to be scarcely worth mentioning. While military courtesy as practiced by regular troops was not strictly observed, the proportion of men who on passing or addressing officers rendered the prescribed salute was considerably increased during the last days of the encampment, showing that in this respect, too, there was an improvement.

MESSING ARRANGEMENTS.

The lessees of the Sweet Springs hotel had contracted to subsist every officer and man in camp for fifty cents a day. The meals were at first taken in a dancing-hall of large dimensions pertaining to the hotel; but this hall being needed for the purpose for which it was intended, the tables and benches, which had been procured for the accommodation of the troops sufficient in number for half of them at a time, were removed to a shady place in front of it after the first day. In company with the governor and his staff, I myself dined one day at this hall and found the food sufficient in quantity, and as to quality and variety superior to that furnished to men in the Army. There was, nevertheless, considerable fault found with the meals, especially with the manner in which they were served; and this complaint was, I believe, not altogether without foundation.

The distance of the mess-hall from camp seemed to be another objectionable feature of the arrangement. At the Illinois encampment, which I visited last year, a ration superior to the Army ration was supplied by the State at a cost of 25 cents. This ration was somewhat added to by purchase, was cooked and served in camp by persons hired by each company, the consequent additional cost probably not exceeding 10 cents. The resulting meals were satisfactory, and had they not been the remedy would have lain with the company officers, under whose supervision they were prepared, and who thus gained valuable experience in feeding men in camp. It is suggested that the expediency of adopting a similar plan in Missouri be carefully considered before the commencement of another encampment.

INSPECTION.

On Friday, the 16th instant, the infantry of the command was ordered to be paraded in fatigue dress by battalion for inspection by Colonel Bull and myself. At Colonel Bull's desire, I conducted the inspection, he accompanying me until called off by other duties. To make the occasion as instructive as possible, the inspection was in every case where it was practicable preceded by a review, and all errors observed either at the review or the inspection, whether by officers or men, were pointed out, the corrections being always well received.

The troops were all armed with the Springfield rifle, caliber .45, with gun-slugs attached, but without safety-notch, and having the old sight. Though serviceable, the rifles were not, as a rule, in good condition, barrels and rear sights being more or less

rusty, stocks battered, and generally showing rough usage. In many cases the fouling of the bores from the previous days' firing had not been removed. To the general neglect noticeable in this respect the rear company of the Second Infantry constituted a notable exception. Wherever a gun was perfectly clean, the soldier was commended for his care of it. Almost all the men threw their pieces up for inspection in an extremely awkward manner, and even companies otherwise perfect in drill were deficient in this respect. Many, in fact most of the waist-belts seemed old, rotten, unfit for field or any other service, and ought to be condemned. They were generally supplied with a plate of antiquated pattern, which should be replaced by the modern and more slightly one. The McKeever cartridge-box was in use, and seemed to be serviceable in most cases. I did not see a single screw-driver or shell-extractor. Only a few of the companies were supplied with a knapsack of any kind, and that was of an obsolete pattern, of which they seemed to make no actual use. No canteens or haversacks were in the hands of either of the commands. The clothing-bag, canteen, and haversack, especially the two latter, are indispensable parts of an infantryman's field equipment, and no time ought to be lost in supplying these articles to the Missouri National Guard.

All the regiments were clad in uniform resembling in pattern and color the fatigue dress of the United States Infantry, but inferior to it in material, except in the case of the Seventh Infantry, which was decidedly the best-dressed organization present. As a rule, white gloves were worn, and the clothing was as neat as could be expected in camp. The men in one of the companies of the Third Regiment were without gloves, and a few of them wore trousers not uniform. But few companies were supplied throughout with the prescribed cap ornaments. Shoes of all patterns and styles were in use, some entirely unsuited for field wear.

Besides the fatigue uniform, all but one of the companies of the Fifth Infantry had a neat, full-dress uniform similar to that worn by the United States Corps of Cadets. At least two companies of the Third Infantry and the cavalry troop were also supplied with and occasionally wore a full dress. Unless all the companies have the same full uniform, it would seem advisable to order fatigue dress to be worn at regimental formations. All uniforms are provided by the individual wearers or by the organization to which they belong.

Upon the conclusion of the inspection of the arms, dress and appearance of officers and men, a minute inspection was made of the camps of the several regiments. Each was found supplied with a number of wall-tents, filled bed-sacks, and stools sufficient for the shelter and comfort of its members, who had brought with them their own blankets. The police of the camp was good, and the arrangement of the interior of the tents neat; but only one regiment (the Second) possessed a sink—a mere pit, unscreened from view, and therefore little used. The consequence was that the ground at no great distance from the tents was covered with excrement, a circumstance which, had the camp continued a few days longer, would have impaired its salubrity, and which, as it was, must have offended the sense of decency of its occupants. The health of the troops was, however, good, the principal complaint being diarrhea, induced by use of the saline water from Sweet Springs, which acts at once as a diuretic and cathartic. The sick were treated in their tents by the regimental surgeons. There were no hospital accommodations, and apparently none were needed. Subjects of serious illness, had there been any, would have had to be sent home for treatment. Water from the spring was brought to camp in barrels. There were no bathing facilities.

I found that neither the companies, regiments, nor camp headquarters kept proper records, and it was therefore difficult to obtain reliable data respecting the several organizations. No regular morning report was rendered by the companies to the regimental adjutants, nor by the latter to the adjutant-general. The only information furnished the commanding general by the regiments was a daily memorandum which showed the number to be fed. A consolidated morning report was therefore not made at all. It is suggested that this was a serious omission, to be avoided at future encampments, for it is essential to a well-ordered military camp or post that the commander of each and every organization embraced by it should at an early hour every morning be accurately informed of the state of his command, and the only means by which this requirement can be enforced is to exact from him the rendition or compilation of a report indicating the status of every one of his officers and soldiers. If proper blank forms were printed and distributed beforehand these reports could be easily prepared, and in rendering a systematic management of the command possible would materially conduce to its discipline and welfare.

The equipment of the infantry has already been sufficiently described. I saw very little of the small artillery detachment, with which a commissioned officer was present only a part of the time, a non-commissioned officer, who seemed to be a very competent man, being in charge during the last few days of the encampment. The detachment had in camp two 3-inch rifled guns, with carriages and limbers complete, all in

serviceable condition, also the requisite sets of harness, but no horses. An improved Gatling gun, caliber .45, also formed part of its equipment. The detachment was chiefly active on the day of the sham fight and in firing salutes and the morning and evening gun.

The cavalry were well mounted upon their own horses, and were armed with the saber and Colt's revolver, caliber .45. They also had a rifle each, a magazine gun, which seemed to be a modification of the Winchester system, but of these rifles only a few were brought to camp for use of the guard.

ORGANIZATION.

Besides providing for the enrollment in time of public danger of all able-bodied male inhabitants of the State between the ages of eighteen and forty-five years, being citizens of the United States, or having declared their intention to become such, the military code of Missouri authorizes the organization in times of peace of a volunteer militia, denominated the National Guard of Missouri, without clearly limiting its number. The minimum enlisted strength of companies of infantry, cavalry, and batteries of artillery is thirty-four, thirty, and forty-eight, and the maximum eighty, seventy, and one hundred and one, respectively. The organization of companies of each arm into battalions, and of battalions into regiments, and the formation of five brigades and one division are also authorized, but so far as I have been able to learn the only organizations actually extant, except three independent St. Louis companies (two of them colored), are those referred to in the table, two brigade organizations which formerly existed, though never formally broken up, having virtually collapsed.

The governor, as commander-in-chief, has a staff of an adjutant-general, surgeon-general, and judge-advocate-general, each ranking as a brigadier-general; of an inspector-general, with rank of colonel; and of four aids-de-camp (lieutenant-colonels). The adjutant-general is *ex officio* quartermaster-general, paymaster-general, chief of ordnance, and commissary-general, and is the only salaried militia officer, receiving \$2,000 per annum. He and the inspector-general were the only general staff officers officially present at the encampment. The field officers of a regiment are elected by the company officers, and the latter by the enlisted men of their respective companies, the commander-in-chief having the power to fill by appointment any vacancy existing after two elections have been ordered to fill it. Regimental staff officers, consisting of a surgeon, assistant-surgeon, adjutant, quartermaster, commissary, ordnance officer, chaplain, and judge-advocate, all ranking as captains except the surgeon, who holds the rank of major, are appointed by the colonel, who also appoints the non-commissioned staff. Non-commissioned officers of companies are appointed by the captains.

The law provides that the National Guard of Missouri, when called into active service, shall receive the same pay and subsistence received by the U. S. Army, except that the enlisted men of said guard shall receive 50 per cent. of such pay in addition thereto, but what constitutes active service is not clearly defined, and organizations that were engaged in the quelling of riots under direction from competent authority complain that very inadequate provision was made for their subsistence and comfort, and that they have received no compensation.

The military code of the State adopts such of the laws, articles of war, and rules and regulations for the government of the Army of the United States as the commander-in-chief may see fit to enforce and as are not in conflict with the State law. The code also recognizes as binding upon the members of any organization those of its by-laws which, not being inconsistent with existing laws, have been approved by the commander-in-chief.

GENERAL REMARKS AND RECOMMENDATIONS.

Considering that in the history of the State its militia was for the first time assembled in camp; that the attendance was wholly voluntary and in many cases involved the risk of loss of position; that the State not only not compensated but permitted the burden of expense and outlay of every kind to rest solely upon those who attended; that, on the whole, excellent discipline was maintained, and that reasonable progress was made in drill, I do not hesitate to pronounce the encampment as eminently successful. That it may have the effect of substituting for the present niggardly policy, founded upon erroneous impressions, a liberal one, recognizing the urgent need of an efficient State service, and the fact that it cannot exist without adequate provision for its support, I sincerely hope and wish. For otherwise the discontent and discouragement now manifest in the minds of the National Guardsmen may speedily ripen into demoralization, and result in the disbandment of many if not all of the few remaining already much-reduced organizations. And the State may have occasion to lament when it is too late the indifferent and illiberal attitude of the legislature toward those of its citizens whose

patriotism and military ardor must be its main stay in the hour of danger. An encampment of at least a week's duration, of which the expenses are entirely borne by the public, is believed to be a *sine qua non* of the efficiency of the National Guard, no matter how thoroughly or regularly armory instruction may have been carried on.

The camp broke up in an orderly manner on Saturday, each regiment or other independent organization returning to the acting quartermaster the tents and other equipage that it had received, and before departure saluting, while drawn up in front of the hotel, the governor of the State, who, with the exception of one day on which he was called to the capital on important business, had spent the week at Sweet Springs, an interested spectator of the doings of the troops. On the afternoon of the same day I took my leave from his excellency and the adjutant-general, both of whom had treated me with great courtesy, returning to my station part way on the same train with the two regiments from Kansas City.

In accordance with your direction I submit the following recommendations with respect to future encampments, premising that they should not be construed as implying censure of the conduct of the one just closed, and held under the many disadvantages already adverted to.

The selection of a camp site should, if possible, be avoided which does not afford the requisite space for the simultaneous deployment of skirmishers of all the battalions to be concentrated thereat, and for the separation of the flank rows of the tents of different regiments by an interval of at least twenty-five yards; which does not contain ground suitable for the establishment of a rifle range (the requirements in this respect are succinctly set forth in Blunt's Rifle Firing, pp. 180-88); and which lacks facilities for bathing.

Throughout the encampment the troops should be subjected, in accordance with a previously prepared printed programme published as a general order at the outset, to a systematic course of instruction, including daily drills by battalion and as skirmishers, a guard mount and dress parade for each regiment, the latter to be preceded by a company inspection, and target practice for a portion of the command. The company drill and the manual might be omitted if sufficient practice has been had in them at the armory. Should there be delay in the directed formation of a battalion or company, or should either be dismissed before the sounding of the recall, a demand for an explanation should be addressed to the commander of the organization by his immediate superior with a view of ascertaining the responsibility for and preventing a repetition of the delinquency.

A commodious, adequately-furnished office-tent should be provided for the use of the adjutant-general of the camp, who, or some officer acting in his stead, ought to be in constant attendance thereat during the day for the transaction of business, and who, besides having competent and sufficient clerical assistance, should have placed under his orders a number of orderlies, regularly detailed for that purpose and wearing their side-arms, including an orderly trumpeter, to be charged with the sounding of all calls in accordance with the programme. These calls to be repeated by a trumpeter of each of the regiments in camp.

The commanding general should be left unhampered with the fiscal affairs of the encampment, and should be able to devote his entire time to the supervision of the military instruction of his command and to the correction of all irregularities.

I have the honor to be, your obedient servant,

THEO. SCHWAN,
Captain Eleventh Infantry.

FORT COLUMBUS, Governor's Island, N. Y. H., August 9, 1886.

THE ADJUTANT-GENERAL, UNITED STATES ARMY,

Washington, D. C.:

SIR: In obedience to Special Orders, No. 131, current series, from the Headquarters of the Army, and letter of instructions from your office of June 8, 1886, I have the honor to submit the following report of my inspection and observation of the several organizations of the National Guard, State of New York, on duty at the State camp of instruction at Peekskill, N. Y., during the period extending from June 19 to August 7, 1886:

By General Orders No. 14, dated June 2, 1886, from General Headquarters State of New York, the camp was constituted a military post, with a post commander (Maj. Gen. Josiah Porter) and staff.

The camp was opened on the 19th of June by the prompt arrival of the commanding officer and staff, and the Fourteenth Regiment, from Brooklyn, N. Y., everything having been prepared for their reception, *i. e.*, the tents pitched, an abundant supply of camp and

garrison equipage on hand, and the immense kitchen and mess-house in good working order. The routine of duties as prescribed by Orders, No. 1, from post headquarters, was begun at once, and from that day until the close of the camp, on the 7th instant, there was no departure from it.

THE TROOPS.

June 19 to 26.—Fourteenth Regiment, present and absent, 36 officers and 564 men; in camp June 20, 35 officers and 427 men.

June 26 to July 3.—Eleventh Regiment, present and absent, 29 officers and 453 men; in camp June 27, 29 officers and 352 men. Thirty-second Regiment, present and absent, 28 officers and 453 men; in camp June 27, 26 officers and 334 men.

July 3 to 10.—Eighth Regiment, present and absent, 25 officers and 437 men; in camp July 4, 19 officers and 344 men. Seventy-fourth Regiment, present and absent, 26 officers and 375 men; in camp July 4, 22 officers and 271 men.

July 10 to 17.—Sixty-ninth Regiment, present and absent, 39 officers and 819 men; in camp July 11, 38 officers and 586 men.

July 17 to 24.—Sixty-Fifth Regiment, present and absent, 33 officers and 501 men; in camp July 18, 29 officers and 417 men. Seventh Provisional Battalion (13th, 24th, 26th, and 32d separate companies), present and absent, 12 officers and 275 men; in camp July 18, 11 officers and 212 men.

July 24 to 31.—First Provisional Battalion (1st, 8th, 25th, and 34th separate companies), present and absent, 13 officers and 225 men; in camp July 25, 12 officers and 205 men. Second Provisional Battalion (29th, 31st, 2d, and 39th separate companies), present and absent, 15 officers and 280 men; in camp July 25, 10 officers and 222 men. Third Provisional Battalion (10th, 12th, 18th, and 30th separate companies), present and absent, 11 officers and 255 men; in camp July 25, 10 officers and 214 men.

July 31 to August 7.—Fourth Provisional Battalion (3d, 7th, 21st, and 33d separate companies), present and absent, 12 officers and 249 men; in camp August 1, 11 officers and 222 men. Fifth Provisional Battalion (4th, 14th, 15th, and 23d separate companies), present and absent, 14 officers and 250 men; in camp August 1, 13 officers and 192 men. Sixth Provisional Battalion (16th, 27th, 36th, and 37th separate companies), present and absent, 14 officers and 228 men; in camp August 1, 13 officers and 186 men.

It will be observed from the foregoing that the percentage of attendance in camp of the separate companies was in excess of that of the regiments. The regiments were from the large cities: New York, Brooklyn, and Buffalo.

The attendance for the regiments averaged 78.33 per cent., and for the separate companies 82.28 per cent.

CLOTHING.

The clothing for all of the troops was of the State-uniform pattern, consisting of a black helmet, forage-cap, overcoat of blue or gray, double-breasted dark blue coat, and light blue trousers. It seems a pity that blouses are not supplied by the State. Most of the organizations, however, are furnished with them at their own expense, and some of the regiments and separate companies have white helmets and trousers. If the blouse were made an article of issue and each man supplied with one, the uniform would be well enough adapted for field service. A heavy, double-breasted uniform coat is not a comfortable garment to wear at drill when the mercury stands at 85° or 90° in the shade.

ARMS AND EQUIPMENTS.

The arms are the Remington rifle, caliber .50, with ordinary bayonet. The Frazier patent cartridge-box, carried on a black leather waist-belt, with a capacity for twenty rounds of ammunition, is in use. When not filled with ammunition, a wooden block pierced with holes is carried. I was informed that this block of wood was necessary to keep the box in shape. Nearly all the officers with whom I conversed on the subject preferred this rifle and accouterments to the Springfield, caliber .45, and the McKeever cartridge-box.

The troops were supplied with knapsacks, canteens, and haversacks. The knapsack was of the old glazed pattern, with a wooden frame inside to keep it in shape. It looks well, but would be utterly useless in campaign. It always was an instrument of torture. The canteens and haversacks were very good. The arms, accouterments, and equipments were always kept in a clean and serviceable condition.

There was ample tentage of first-rate quality and pattern for a thousand men. The large-sized wall-tent and medium-sized hospital-tent were in use. Although these tents had been in use for five years, they were in excellent condition, and such was the care taken of them by the chief of ordnance that hardly a stain was noticed upon them.

Each tent was supplied with light portable cots and mattresses, two light camp-stools, and enough blankets of a very superior quality to make the men comfortable at night. Water-pails, tin cups, and candlesticks were also supplied. Altogether it was the best arranged and most comfortable camp I have ever seen.

The troops were rationed by contract. Three times a day, as the drum beat the breakfast, dinner, and supper calls, the whole command marched to the immense mess-hall and were certain to find the most substantial meals carefully prepared for them. The cleanliness of the kitchen, mess-hall, mess furniture, and surroundings reflected great credit upon the contractors and the commissary officers. I now think that this system of feeding troops in camps of instruction is the best I know of, as the companies have nothing but their drills, recitations, &c., to think of, and there is only one kitchen and mess-tent in camp, instead of ten or fifteen under the old system. The food is also better, and better prepared.

THE STAFF DEPARTMENTS.

General Varian, the chief of ordnance, and his assistant, Colonel Brownell, had charge of the quartermaster's and subsistence departments. The camp was laid out, the tents pitched, the kitchen and mess-house put in thorough working order, and the sinks and latrines prepared before the arrival of the Fourteenth Regiment on June 19. The camp equipage was transferred to the regimental quartermaster upon his arrival, and by him delivered to the companies, receipts being duly signed for the property. Upon the departure of this regiment from camp on the following Saturday the property was turned over again to the post quartermaster and duly accounted for, and by him again transferred to the incoming troops, and so on from week to week during the encampment. The system was a complete and thorough one.

The regiments and separate companies were transported from their homes to the camp and from thence back again under contracts made by the chief of ordnance (acting quartermaster-general) with steamboat and railroad companies. They arrived and departed at the hours named in the schedule. The whole machinery of transportation worked smoothly and pleasantly.

As the troops were fed by contract, there were very few papers to be prepared by either the company commanders or the acting commissary of subsistence. Provision returns were submitted in the usual form, were consolidated by the regimental and battalion commanders, and forwarded to post headquarters for approval and orders. The post adjutant examined these returns carefully, approved them when correctly made out, and directed the acting commissary of subsistence to furnish the number of meals called for. The system was a good one.

The ordnance department *proper* had very little to do in camp. With the exception of the issue of blank cartridges (twenty rounds per man), ammunition for the morning and evening gun, and for two or three salutes by the platoon of light 12-pounders, there were no issues of ordnance and ordnance stores.

MEDICAL DEPARTMENT.

Surg. Gen. Joseph D. Bryant, who made weekly visits of a day or two to camp, had charge of the medical department. It was very thoroughly organized. The regimental and other surgeons and assistant surgeons were exceedingly careful and painstaking in the discharge of their duties. There was very little sickness of any kind in camp. The cesspools, sinks, &c., were frequently visited by these officers, and the senior surgeon was required to make a report in writing to the commanding officer three times a day as to the sanitary condition of the camp and its surroundings.

PAYMASTER'S DEPARTMENT.

Paymaster General Lloyd S. Bryce paid the troops weekly just before their departure from camp. Lieutenant Colonel Joseph P. Eustace, his assistant, and Captain Horatio P. Stacpole, Tenth Battalion, prepared the checks for General Bryce's signature. Individual checks were made out for each officer and enlisted man. The pay-rolls were certified by the captains of companies, and verified by the post adjutants. Great care was observed in the payments, which were very rapidly conducted.

INSPECTOR GENERAL'S DEPARTMENT.

There was no inspection by any officer of this department while the troops were in camp.

TARGET PRACTICE.

There was no target practice at the camp this year. The adjutant-general of the State, who was also the commanding officer, informed me that it had been determined at Albany that the regiments and separate companies should practice at the home ranges so as not to interfere with the practical instruction in drills and recitations at the camp. The New York and Brooklyn regiments have their range at Creedmore, and the other regiments and companies have target ranges of their own.

INSTRUCTION.

The drills, dress parades, and guard mountings were had at the hours prescribed in orders. When two regiments were present there was a dress parade just before guard mounting as well as at retreat. The dress parades and guard mountings were from first to last very creditably executed, some regiments and provisional battalions being a little better than others. The drills were in the school of the company and battalion, with some practice in skirmishing. I do not think that sufficient time was given to that most important part of the tactics entitled "instructions for skirmishers." The marching in "columns of fours," company fronts, &c., can all be taught in the armories, but the practical part of the skirmish drill can only be learned in the camp. The breech-loader has given such an "impetus to the employment of skirmishers," that a neglect to teach the subject practically to officers and men, by battalion as well as by company, should not be tolerated. The drills were as a rule admirably conducted. There were some crudities, which were always quickly noticed and corrected by the commanding officer and his assistants. The officers and men were enthusiastic and teachable. It seemed to me, however, that a good many of the company officers were inapt and wanting in their knowledge of their duties, and that they required drilling and setting tip. I think that probably a good deal of instruction might be imparted to the officers and sergeants at their armories. Some well-instructed officers might be detailed to drill and instruct them, and require them to recite in tactics, &c. The instruction should be theoretical as well as practical, as this camp has very fully demonstrated the great value and need of theoretical instruction.

Captain Horatio P. Stacpole, who supervised the company drills, is an excellent tactical officer. He was present at all of these drills, and made daily reports in writing to the post adjutant, setting forth the mistakes and inaccuracies he had observed. These reports were sent by the post adjutant to the commanding officers of regiments and battalions, with orders from the post commander to have the mistakes corrected and the inaccuracies rectified. Nothing escaped the vigilant eye of Captain Stacpole. I observed that some of the adjutants at dress parade, when taking their places after dressing the ranks and commanding "Front," did not march "to a point midway between the line of field officers and the commanding officer;" that the officers on approaching the commanding officer at the conclusion of the ceremony were not always halted by the adjutant "at six yards from the commanding officer," and that the ceremony was not always concluded when the officers saluted and the commanding officer had acknowledged the salute and given his instructions. In quite a number of the organizations the officers in line with the commanding officer, who had faced about in front of them, marched fifty or seventy-five yards farther to the front, when they halted; they then separated, one-half of them moving in semicircular fashion to the right, the other half to the left of the commanding officer, until they met again in front of him, when they all faced toward the battalion, the commanding officer with his back to the line of officers, who remained standing at attention. The first sergeants, who had meanwhile been observing these maneuvers by the officers, then brought their companies to a carry, closed the ranks and moved them off by *echelon* from the center to the front, and after marching them about one hundred yards away from "their parade grounds," countermarched in columns of fours and returned to their streets. The band followed up this *echelon* movement and the officers, in two ranks and marching by the flank, followed the music to the camp-ground, where they were dismissed. Now, this waiting by the men at attention, and all the extra marching, semicircular wheeling, &c., by the colonel and his officers, seemed very pretty to the multitude, but to the military on-looker it appeared a little ridiculous. It marred the beautiful ceremony, and was fatiguing to the men, besides being a departure from the instructions for dress parade laid down so clearly on page 351, Infantry Tactics (Upton's).

DISCIPLINE.

Under this head very little has to be said, as the discipline was indeed admirable. The men were obedient and respectful. The quiet that prevailed in camp, particularly between taps and reveille, was remarkable. Military courtesy, as a rule, was strictly

observed. The police of the camp and its surroundings was carefully attended to; in fact, I think it was the cleanest camp I have ever seen.

Guard duty in the camp was very creditably performed, particularly so by the Sixty-ninth Regiment and separate companies. The officers and non-commissioned officers of the guards made frequent visits to the sentinels, who were generally alert and well instructed. Guard duty, however, cannot be taught in a single tour, and this was about as much as each officer and enlisted man had to do with it while in camp. Lieutenant N. B. Thurston, Twenty-second Regiment, who is a most competent and painstaking officer, delivered lectures to the guard details the day before they were required to march on guard. These lectures covered the duties of officers, sergeants, corporals, and sentinels; they were graphic and instructive. He also made frequent observations of the guards and sentinels, and caused all inattention and irregularities to be corrected.

GENERAL REMARKS.

The facilities for placing the National Guard of the State in a condition for active service are very good, if I am to take this camp as an example. The staff departments have competent officers at their heads, and indeed the officers generally, of the line as well as of the staff, have a good knowledge of their duties, and are zealous in performing them.

As a rule, I do not like to select particular organizations for special remark, but I can not refrain from saying a word or two about the Sixty-ninth Regiment and some of the separate companies. The splendid military appearance of the Sixty-ninth would have attracted the notice of any professional observer. The men were stalwart and manly, soldierly and teachable. The stature of the rank and file, few of whom I think were under 5 feet 8 inches, were so even that the companies required very little sizing; this was a subject of remark during their week in camp. The Twenty-third Separate Company, from Hoosac Falls, was a superb body of men, well drilled and disciplined; they are a credit to the National Guard of the State. The Eighth Separate Company, from Rochester, presented a fine military appearance; it was well instructed in drill, particularly so in marching. The Twenty-sixth Separate Company, from Elmira, was the largest one in camp, having three officers and ninety-eight men present; it was a pleasure to look at it. But, indeed, all the separate companies were in good military shape, and the provisional battalions formed from them were easily handled and made rapid progress in drill during their respective tours of duty. The officers selected to command these battalions were of a high order. Lieutenant-Colonel Harding, Twenty-second Regiment, and Lieutenant-Colonel Dowd, Twelfth Regiment, brought their battalions to a high state of efficiency; indeed all the battalion commanders were indefatigable in their exertions to improve their commands. I think I ought to state here that the improvement made by all the regiments and separate companies during their short time in camp was very apparent and most gratifying, and I have no doubt that they all returned to their homes with every officer and man physically, as well as professionally, better than when they left them.

The governor of the State made one visit to the camp. The Eighth and Seventy-fourth Regiments were present, and were reviewed by him. Colonel Scott, Eighth Regiment, commanded the troops, and conducted the ceremony in a strictly military manner. All of the ceremonies incident to this visit were well performed.

General Orders, No. 14, issued by direction of the Governor of the State, constituting the camp a military post and placing a competent officer in command, was, in my opinion, a step in the right direction; it assured uniformity in discipline and instruction. Maj. Gen. Josiah Porter, the adjutant-general of the State, an officer of long service and large experience, was placed in command. The selection was in every respect an admirable one, as General Porter has a thorough knowledge of his duties and responsibilities as a post commander, and is a determined, dignified, and courteous officer. He was constantly in camp attending to the duties of his position, and made his presence felt everywhere for the good of the command.

Colonel Fred. Phisterer, an officer of long and distinguished service in the Army, was post adjutant. He was present during the whole encampment. The morning reports, surgeon's reports, pay-rolls, ration returns, &c., all came to his office, and were thoroughly scrutinized by him. He instructed the first sergeants in the manner of preparing these papers and keeping their books. He instructed all the sergeants in their duties as guides, as well as in other matters. As he was thoroughly able to give information upon all military subjects to all inquiries, he was constantly appealed to by officers as well as sergeants. Verily, his office was no sinecure. He made daily inspections of the camp and its surroundings, when every street, tent, cot, blanket, &c., underwent a most rigid scrutiny. I accompanied him on several of these inspections, and was much impressed by them. Nothing escaped his notice, from a half-burned

match in the company street to a dirty candlestick in a tent. Blankets and bedding had to be carefully folded after having been aired. The tent-floors had to be raised daily so as to admit the sun and air below them. As there was a place provided for everything, he insisted that everything should be in its place. I have no doubt that a good many of the men looked upon all this as trivial, but Colonel Phisterer was always careful to explain that in small matters as well as in large the soldier should be a model of neatness, and that if he were permitted to neglect a small amount of duty to-day he would in all likelihood neglect more to-morrow.

In conclusion, I desire to thank General Porter and the officers of his staff for the courtesy and kindness extended to me during my official visit to the camp at Peekskill.

I am, sir, very respectfully, your obedient servant,

R. H. JACKSON,

Maj. 5th Artillery, Bvt. Brig. Gen., U. S. Army.

ZANESVILLE, OHIO, *August, 21, 1886.*

THE ADJUTANT-GENERAL U. S. ARMY:

SIR: In accordance with your letter of instructions of June 17, I have the honor to make the following report of inspections of four brigade encampments of the Ohio National Guard, held in June, July, and August, 1886. Each one occupied eight days. I was present as required in orders, was received with great courtesy by all officers, and accorded every facility for making observations and inspections:

The first encampment was near Washington Court House, and the brigade consisted of two batteries of First Artillery; First Infantry, seven companies; Sixth Infantry, eight companies; and Thirtieth Infantry, six companies—in all, 1,145 men. Colonel Entekin, Sixth Infantry, commanded.

The second encampment was near Springfield, and the brigade consisted of two batteries of First Artillery; Seventh Infantry, eight companies; Fourteenth Infantry, eleven companies; and Ninth Battalion (colored) three companies—in all, 1,150 men. Colonel White, Seventh Infantry, commanded.

The third encampment was near Mount Vernon, and the brigade consisted of three batteries of First Artillery; Fifth Infantry, six companies; Eighth Infantry, eight companies; and Seventeenth Infantry, eight companies—in all, 1,365 men. Colonel Pocock, Seventeenth Infantry, commanded.

The fourth encampment was near Sandusky, and the brigade consisted of Second Infantry, eight companies; Third Infantry, seven companies; and Sixteenth Infantry, nine companies—in all, 1,150 men. Colonel Norton, Sixteenth Infantry, commanded.

One battery encamped near Fort Wayne, Indiana, there being eight batteries in the First Artillery.

Adding the absentees, with and without leave; to those present, the enrolled strength of the National Guard is 5,800. The percentage of attendance should be higher.

The organization of regiments conforms as nearly as possible to that of regular troops, the infantry, however, having a major for each battalion of four companies. There is one surgeon, one assistant surgeon, and hospital steward on the staff of each regiment.

The artillery is armed as follows: The men with sabers; three batteries with two 3-inch rifles and two Gatling guns each; one battery with four 3-inch rifles, one with four Napoleon guns, one with four brass 6-pounders, one with two Gatling guns and two brass 6-pounders, and one with two 3-inch rifles and two brass 6-pounders. All are in from fair to very good condition. The regulation harness is used for mounted drill, but it is old and unreliable.

The infantry is armed with Springfield rifles, caliber .45; regulation belts; McKeever cartridge-boxes, &c. Nearly all these rifles have been in service nine or ten years, are much battered, and not kept in good order by the men. A few of the later patterns have been in use for a year or two, and are in good condition. The adjutant-general informs me that he is going to send all the old rifles to Government arsenals as soon after the encampments as practicable, to be thoroughly repaired, refitted with improved sights, &c. The State has altogether, in use and in armories, 6,220 rifles. There is on hand about 135,000 rounds of rifle ball-cartridges and about 500 rounds of shot and shell for field-guns, most of this being at the Columbus Arsenal.

The uniform is the same as that worn by regular troops, and the fatigue is furnished by the State, the adjutant-general contracting therefor. Judging from the appearance of both old and new uniforms, the material seems to be good and well suited to active service. One-third to one-half the men have overcoats and knapsacks (the latter furnished by themselves), and the remainder will be supplied when appropriations admit.

There is an ample allowance of wall-tents for summer camps, and nearly every company is well supplied, chiefly at its own expense, with blankets, cooking utensils, and table ware for field service.

The food is of excellent quality, and, as a rule, well cooked; I heard but one or two complaints concerning it during the encampments. The ration allowance is 33½ cents per day for each man.

The brigade quartermaster, for all quartermaster and commissary supplies, has full power to contract before the encampment. In some cases, as, for instance, when traveling, regimental quartermasters, commanding officers of companies, &c., make contracts in the brigade quartermaster's name. The appropriations for running expenses are fairly liberal.

Hospital tents and supplies are furnished by the State, and the sanitary arrangements and police of the camps were generally good.

The "pay and allowances" of officers amounts to about half that of their grade in the Army when in the summer camp. For actual service, as in the case of riots, it is doubled, as is that of enlisted men, who receive \$1 per day in camp.

General Orders, No. 11, from the adjutant-general's office, gave the routine of duty for the camps of instruction. With some slight modifications, this routine was preserved in each camp.

The guard duty was rather loosely performed, many of the men receiving but little or no instruction before marching on, although an excellent pamphlet on "instructions in guard duty" was issued to most officers and non-commissioned officers.

There was target practice with field-guns at the third encampment, and fair shooting done with 3-inch rifles at a thousand yards. There was mounted battery drill at the first and second encampments, but, as untrained horses had to be hired, only a few simple maneuvers could be learned. The batteries, with one or two exceptions, owing to recent organization, are well drilled in the manual of the piece and foot movements. There being no authorized manual for loading and firing the new Gatling gun, one devised by a lieutenant of artillery will shortly be adopted. There was no infantry target practice, and but little skirmish drill.

Toward the end of each camp battalion movements were fairly executed, though not, as a rule, with equal facility toward both flanks. The time being short, officers should have compelled more promptness at roll-calls, and better prepared themselves for the drill by a study of the tactics throughout the year.

In accordance with the provisions of an act passed by the last legislature, a board of examiners has been appointed in each regiment to examine into the military qualifications of officers now holding commissions or hereafter to be "elected or appointed."

The schools of instruction were well attended, and great interest was evinced by officers and non-commissioned officers in the discussion of points of discipline, etiquette, and tactics, customs of the United States service, &c. They are productive of much good.

I would recommend that the inspector be an officer of high rank, selected by the Adjutant-General of the Army himself, and that two other officers, one of artillery and the other of infantry, be also appointed as instructors in their respective branches. They will be cordially received by the National Guard, and their instructions heeded.

A permanent camp-ground near the center of the State would remove many disadvantages; supplies could be furnished cheaper, many of a permanent character requiring but a single outlay; the whole cost of transportation would probably be less; a target range could be made and the men drilled on better ground; and much valuable time would be saved by getting into working order sooner.

If brigade encampments are to continue, brigade organizations should be established by law. With this provision, I do not think the objections urged against such encampments by many officers tenable.

To secure a better performance of guard duty, practical instruction in this branch should be made a part of the drill by company officers during the year.

There should be more "setting up" drill, also company skirmish drill, and an annual allowance of ball-cartridges per man, with regulations for target practice.

The officers comply fully with the rules concerning saluting each other, but do not require a strict observance of them from their men. These men are of splendid material, willing and anxious to make good soldiers, and can easily be taught that this neglect is unsoldierly and strikes at the root of discipline.

Great interest is taken in the National Guard by the officers high in authority, and they think, rightly, that it is reasonably well equipped and ready to volunteer for war.

Very respectfully, your obedient servant,

A. P. BLOCKSOM,
First Lieutenant, Sixth Cavalry.

NEWPORT BARRACKS, *Newport, Ky., August 18, 1886.*

The ADJUTANT-GENERAL, UNITED STATES ARMY,
Washington, D. C.:

SIR: In compliance with telegram and letter of instructions from Adjutant-General's Office, Washington, August 7, 1886, I respectfully submit the following report of my observation while in camp with the Kentucky State Guards, at Camp Hindman, Crab Orchard Springs, Ky., from August 8 to 16, 1886:

The troops encamped at the above place were the First, Second, and Third Battalions of Provisional Regiment Infantry, Kentucky State Guards, commanded by Col. M. H. Crump. Total present, 412. The camp was well selected, on an elevated piece of ground, and was laid out according to tactics; drills each day in squad, company, and skirmish, and parade every evening. There was no battalion drill or target practice. Much work was done during the encampment and great progress was made; several of the companies had been organized but a short time before going into camp, and consequently were not as proficient as the older ones. Discipline in camp was well maintained; great improvement was shown in the performance of guard duty; great attention was paid to this duty by the commanding officer and other officers of the camp. The police of camp was excellent. The uniform of these men differed but little from the fatigue uniform of the Regular Army; they had no full dress. The State furnished all supplies, and they were issued by an officer who performed the duties of quartermaster and commissary. The company officers messed with their companies, and company commanders had charge of this mess. The field and general staff had a separate mess. All the cooking was performed by men hired for the purpose; the food was well cooked and of excellent quality.

On August 11 I inspected the whole command thoroughly, and again August 15, when I noticed that it had made marked improvement. The material composing this command is very good; the officers are intelligent and very zealous in the performance of their duties. A majority of the men are young, and all seemed anxious to learn. The arms in use are Springfield rifles, caliber .45, model 1873, and with few exceptions are in good condition; the accouterments are in good order. The tents used were "wall;" there was an ample supply and in good condition.

The system followed by the medical and supply departments, the only ones represented in camp, was similar to the Regular Army; the reports and all papers were made to assimilate as near as possible to the forms used in the Army.

Battery A, Second Battalion, had with it two 3-inch rifles and one Gatling gun, caliber .45 (without horses), all of which were in good condition; the battery drilled well, and both officers and men seemed well instructed.

Company F, First Battalion, arrived in camp August 13. This company is in every respect an excellent one; its arms, accouterments, and clothing were in excellent order; it is the best drilled in the State, and one of the best in the country.

What these troops need most is a thorough drill in the "school of the soldier;" it would improve their soldierly appearance. For the present good condition of the State Guards great credit is due General J. B. Castleman, acting adjutant-general of the State, for the untiring energy and personal attention which he has bestowed on them.

Very respectfully, your obedient servant,

JOHN L. TIERNON,
Captain, Third Artillery.

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE,
Washington, August 10, 1886.

The ADJUTANT-GENERAL, UNITED STATES ARMY,
Washington, D. C.:

SIR: I have the honor to report that, in compliance with a request of the Hon. Robert E. Pattison, governor of Pennsylvania, and in obedience to paragraph 17, Special Orders, No. 123, current series, from Headquarters of the Army, I accompanied the governor in his visit to the annual encampments of the National Guard of Pennsylvania during the month of July, 1886.

I inclose herewith a copy of General Orders, No. 10, from headquarters of the National Guard of Pennsylvania, dated Adjutant-General's Office, Harrisburg, July 10, 1886, which order gives dates and places of the governor's visit to the several camps. I also submit consolidated reports in detail of the strength of the various organizations at the time of the inspections I witnessed. The inspections were made, pursuant to the laws of the State of Pennsylvania, by Brig. Gen. P. N. Guthrie, adjutant-general of the State.

Referring you to my report of the visit I made to the National Guard of Pennsylvania during their encampments of the summer of 1885 (which report was published in full in the annual reports of the Adjutant-General of the Army and of the adjutant-general of Pennsylvania for the year 1885) for all details of organization, equipment, methods of supply, &c., of that admirable body of troops, I desire to here renew my acknowledgements heretofore made of the uniform courtesy shown me by all, and to return once more my hearty thanks for hospitalities extended.

In my report of my visit to the National Guard of Pennsylvania last year I stated that in alternate summers the whole guard was assembled in single encampment, whilst in intermediate years it was encamped by separate brigade in various parts of the State. The great cost of transportation of so large a number of men as compose the National Guard of Pennsylvania was found to be an obstacle to encamping the guard as a unit this year, and it was therefore wisely determined, not only for that reason but for others, to encamp by separate regiments in places not far from the points at which regimental headquarters are located.

I submit herewith an excellent map, showing the points chosen for the various regimental encampments of this year.

I found a wide diversity of opinion among officers of the guard as to the desirability of encamping by separate regiment. Somewhat involuntarily, but in response to quite a general wish expressed by officers of the guard, I submit my views officially upon this subject. It must be conceded that regimental encampments possess much value, not only because less time is consumed by exercises naturally occurring in larger encampments, but for the reason that colonels of regiments, in regimental encampments, are thrown more upon their own responsibility as commanding officers. Moreover, in regimental camps, troops learn better how to supply themselves upon a service which they are more frequently called upon to render to their State as regiments than they do when encamped in larger bodies, in which latter case they are mainly cared for by the brigade and division staff officers of the departments of supply. On the other hand, a serious objection to encamping the guard by regiment, near home, is the host of interested people who thus find convenient opportunity for visiting their friends in regimental camps, the presence of which spectators at times becomes an inconvenience and almost an obstacle to satisfactory performance of military duty. A dress parade or a battalion drill was sometimes undertaken with difficulty, on account of the crowding of spectators around the troops, and occasionally it became necessary to take men from the ranks and post them as a cordon around the parade ground to keep back the throng. As a means of correcting this evil in regimental camps, I would suggest that when regiments are encamped anywhere near their homes camping grounds should be selected as remotely as possible from the railroad station of disembarkment; in marching from the railroad to the camp, perhaps a distance of some miles, the troops would then add to their practice in route marching, and the difficulty of spectators reaching the camp would be so increased as to sensibly diminish the interference caused by their presence, in that instruction which is supposed to be the main object of the camp.

In opinions officially expressed by me last year of the value and admirable condition of the National Guard of Pennsylvania, I have seen no reason this year to make the slightest change. I find it still the same earnest, willing, efficient organization described by me a year ago, and I have few, if any, additional criticisms to make at the present time.

In the most conspicuous defects of the Guard, mentioned by me last year, viz., their general ignorance, for want of practice, of duties of sentinels, and their frequent neglect of prescribed courtesies from inferiors to superiors on duty, I found a marked and almost general improvement this year; but there is still room for much further progress in these respects, and I can not too earnestly suggest that, during the period of encampment, all social relations between officers and their men ought to be resolutely suspended. Discipline, and prompt, ready obedience to orders can not be obtained so long as officers and enlisted men mingle upon equal and perhaps convivial footing in camp. Almost intolerable violations of the fundamental requirement of a military organization (dignified relations between officers and men) were to be observed in some of the encampments this year, and they ought to be rigidly discountenanced if the discipline of the Guard is to be made perfect.

I found in a number of the regiments that my recommendations of last year as to the proper method of instructing enlisted men in guard duty had been earnestly carried out. Members of the Guard, when not on post, were to be found studying written lessons in their duties as sentinels, and many of the companies had supplied themselves with the manual of guard duty, which I recommended in my report of last year. A still more general improvement in guard duty would be insured, however, if my recommendations of last year were fully carried into effect by printing and distributing from headquarters of the Guard a sufficient number of copies of a brief catechism of ques-

tions and answers relating to the duties of sentinels under various circumstances, and these lessons *recited upon* in company armories at home during the winter months.

Another point upon which I would recommend uniformity of instruction throughout the Guard is in the manner of packing and carrying, upon the persons of the men, their regulation field equipments. I found the greatest diversity in this respect, and the uniform appearance of the Guard would be greatly marred thereby when paraded as a unit. The overcoat and blanket ought to be packed and carried according to some prescribed uniform method. One of the regiments had the blanket arranged in a long roll around the edges of the knapsack, the ends of the blanket tied by a slender string, the breaking of which on a march would cause the loss of this article of equipment. All that is necessary to secure such uniformity in packing the kit would be a general order from the commanding general of the Guard.

Still another point in which uniformity is desirable is the sleeping arrangements for the men while in camp. Every possible device for a bed was to be seen. The police of the camps could never be perfect while the men were sleeping in loose straw, thrown upon the bare ground, as was the case in some of the regiments where tents were not floored and where bed-sacks were not in use. If straw is to be used as bedding a very cheap, serviceable bed-sack could be bought by the State at little cost, issued as part of the regular camp equipage to the regiment, and the straw used as bedding be neatly kept in the sacks in the tents during the period of encampment.

Greater care ought also to be taken to prevent mutilation of the tentage by unseemly markings and drawings. If practicable all tents should be officially marked at the State arsenal with the letter and number of the companies and regiments to which they are issued for service, and be regularly reissued annually to the same organization. Subordinate commanders could then be held responsible for any damage occurring to the property, and a careful officer would not be compelled to receive canvas disfigured while in previous use by another command.

When consisting of temporary wooden structures, company kitchens ought also to be arranged with greater view to uniformity. In some of the camps board shanties used as kitchens were found facing toward several points of the compass. Uniformity of plan in these structures would add greatly to appearances, and the same remarks apply to the variety of contrivances used as sinks.

I saw this year the greatest diversity of ingenious means for cooking rations, varying between the extremes of an ordinary camp fire for a field force and complete wooden structures containing either brick ovens or regular kitchen stoves. In one of the camps I ate rations cooked over gas brought in pipes to the company cook fires from a roaring "natural gas" well near the edge of the encampment.

The regiments this year subsisted themselves from a fund of 20 cents a day per man, commutation of rations allowed by the State. In no instance did I find occasion to remark a deficiency either in quality or quantity of food supplied.

Referring to so much of my report last year upon the National Guard of Pennsylvania as relates to their wretched supply of arms and ammunition, I most earnestly renew my recommendations then made. Interest in a soldier's weapons cannot be very great when he knows that they are inferior, obsolete, and almost absolutely worthless. The day may not be distant when these troops will be called upon suddenly for most important State or national service, and the deplorable effect upon the *morale* of the men caused by the miserable arms and ammunition in their hands is not to be estimated. It would seem well, then, if an earnest, united effort were made by the national guards of all the States to secure passage by Congress of some one of the several bills already introduced in that body providing for exchange by the National Government of worn-out or obsolete arms now in the hands of the militia.

I noted with pleasure, again this year, the presence in several of the camps of interested young officers of the Army and cadets on furlough from the United States Military Academy. I do not know anything which could be more instructive to the younger generation of officers of the Army than visits to these encampments of the citizen soldiery, who are, in time of danger, the mainstay of our nation. Such visits might well be encouraged by the War Department, and members of the graduating class of cadets at the Military Academy might profitably visit, during their customary leave of absence, these national guard camps of instruction, where they will see assembled much larger bodies of troops than are ordinarily brought together under the usual conditions of the regular service in time of general peace. They will thus learn that the Regular Army is but a small component factor of the national military strength, and they will familiarize themselves with troops with whom many of them will doubtless be called to serve hereafter should our country be called to arms.

In conclusion, I beg to express my high appreciation of the valuable opportunity afforded me, for the third time, to see the National Guard of Pennsylvania when assembled for instruction in camp. While able, as the official representative of the War De-

partment, to render some slight service to officers and men of that excellent organization, I have myself learned from it much of professional value. I most earnestly commend it once more to the favorable notice of my superiors, and bespeak for it anew every possible help the War Department may be able to extend to it under the law.

I am, sir, very respectfully, your obedient servant,

WM. J. VOLKMAR,
Assistant Adjutant-General, U. S. Army.

FORT SULLY, DAK., September 4, 1886.

ADJUTANT-GENERAL UNITED STATES ARMY,
Washington, D. C.:

SIR: In obedience to paragraph 1, Special Orders No. 159, Headquarters of the Army, Adjutant-General's Office, Washington, July 12, 1886, I inspected the troops and camps of the Iowa National Guard, at Oscaloosa and Marshalltown, and have the honor to report:

The National Guard of Iowa consists by law of forty-eight companies of infantry (at present there are but forty-seven companies), no single county of the State, except Polk, being permitted to have more than one company. These companies are organized into six regiments of eight companies each, and these again into two brigades of three regiments each.

The three regiments of the southern half of the State compose the first brigade, commanded by Brig. Gen. H. H. Wright; the three regiments of the northern half compose the second brigade, under the command of Brig. Gen. B. A. Beeson.

The First Brigade, composed of the Second, Third, and Fifth Regiments, had its encampment in the fair-grounds at Oscaloosa, from 2d to 6th of August. These grounds, though very well adapted to the purpose, do not permit the establishment of a brigade encampment in strict accordance with regulations. Two regiments were encamped together in one part of the grounds, the Third Regiment in another part, separated from the other two by the race-track, the grand stand, and many outhouses belonging to the fair-grounds. The race-track had previously been rented to certain parties who kept running and trotting stock. These parties, exercising their right to use the track, somewhat interfered with the military exercises and very greatly marred the comfort of the camp by raising clouds of dust.

The troops were quartered in hospital-tents, pitched (previous to their arrival by contract labor) with great regularity and as nearly in conformity with regulations as the ground permitted. The tents were floored with rough boards. Each soldier was provided with a bed-sack of clean straw, and was required to bring one blanket. The company mess-tables and benches, roughly constructed of boards, were sheltered by flies and very effectively served their purpose. Each company had two or more cooks and assistants. The cooking arrangements were generally good, and the food, as a rule, well served.

Each regiment was provided with a comfortable sink for its enlisted men, and there was also a general sink for officers, all being disinfected daily.

The grounds were policed daily, the company streets and vicinity being kept in an exceptionally good and cleanly condition, but the vicinity of headquarter tents and all shady portions of camp were kept continually filthy by the crowds of visitors, who left their melon-rinds and the *débris* of their lunches scattered in profusion around.

General Orders No. 2 fixed the order and hours of exercises. It was rigidly adhered to during the encampment. The morning-drill was by company, the evening drill by battalion. There being no ground available, no brigade drills were attempted.

The Second Brigade, composed of the First, Fourth, and Sixth Regiments, had its encampment from 16th to 20th of August in the grounds of an abandoned beer-garden about two miles from Marshalltown. In every respect the location was better than that at Oscaloosa. The regiments were camped in *echelon* in a beautiful grove affording most welcome shelter from the rays of an excessively hot sun. Regimental drill-grounds were convenient and ample, while at half a mile distance was a large level field, in which brigade drills were held every afternoon.

The troops were quartered exactly as already described for the Oscaloosa camp. General Beeson and most of the senior officers of the Second Brigade having been present at the Oscaloosa encampment, made excellent use of the opportunities. Messing and cooking facilities and some other lesser details were sensibly improved.

The rank and file of each regiment were provided with comfortable sinks; but strangely enough, no such provision was made for officers.

The grounds on which the camp was pitched having for some years been unoccupied and neglected, were at first in a wretched state of police, but this was effectually and thoroughly remedied before the close of the encampment.

The morning drills of this brigade were invariably by battalion, the afternoon by brigade. Both brigades had brigade dress parade each afternoon.

DRILL—KNOWLEDGE AND ZEAL OF OFFICERS.

The zealous effort at extreme exactitude in the performance of duty without consideration of personal comfort or expense that actuates all the officers of the higher grades is most commendable. No generals, general staff officers, and field officers of regiments could possibly exhibit more desire to perform every duty in strict accordance with law, regulations, and customs of service than those of the Iowa National Guard; but though some of the captains of each regiment emulate this zeal of their superiors in rank, the majority are more or less ignorant, some absolutely unfit for any position of command.

There are a few companies in the Iowa National Guard whose marvelous perfection in all company exercises equals, if it does not surpass, the very best crack companies of militia of the Eastern States. Of the forty-seven companies at least ten would do credit on drill to any regular regiment of the Army. There are a few companies which in instruction and drill are scarcely better than the "umbrella and cornstalk" militia of *ante bellum* days. The instruction and performance of the larger majority of companies lie between these extremes.

The material of rank and file is generally most excellent; indeed, it is difficult to believe that better can be found in any State or country. The reasons for the great difference in instruction of companies in the same regiment are, first, their isolated condition; forty-seven towns of greater or less population each furnishes a company; except for the five days in each year when they are brought together in these encampments, there can be no rivalry, no means of comparing the performance of one with that of another; and second, the present mode of officering the companies, common, I believe, to the militia of all the States, and which is faulty in the extreme. A man is elected captain by the votes of the men of the company. These are given, as a rule, without regard to his fitness for the position, but from personal popularity, the issue least likely to result in a good choice. Having once gained the position, the captain elected on personal and social grounds will naturally try to retain it by still being the "good fellow" and as easy as possible on "the boys;" the company becomes a mere machine for the advancement of the personal or political aims of the captain, and any military idea or obligation repugnant to this is ignored. The militia will never be what it ought to be—the grand standing army of the nation—until the present system is superseded by something better. If the election of officers by the rank and file be regarded as absolutely necessary to the system, the State should make an advance by requiring that the elected officers be examined as to military knowledge, qualification, and general fitness by a board of competent officers, their report of rejection to be final.

The difficulty of getting together any considerable number of men probably prevented the captains from exercising their companies in platoon drill. Thus cut off from any direct command, the lieutenants, except in a few of the best-drilled companies, were singularly ignorant of their duties. This was especially noticeable at grand guard mounting, some of the lieutenants not knowing how to get a platoon properly from line into column. Company drill is for the education of lieutenants and the rank and file, and when a private has matured if he has completed his education. If each captain had performed his whole duty to his company and State, the company would present itself at the encampment ready in all respects for battalion drill, which is for the education of captains and guides.

Considering the very imperfect knowledge of company drill of many of the companies, the success of the colonels in securing fair battalion drills was evidence of rare ability and persistent determination.

The brigade drills of the Second Brigade were generally well performed, and were a pronounced success in giving to both officers and men a realizing sense of the actualities of warfare and the utility of perfection in drill. General Beeson proved himself an able and patient tactical instructor.

The brigade dress parades each day and the review of the governor on Thursday were well performed at each of the encampments.

ARMS.

All the Iowa National Guard is well armed with the Springfield rifle. About half the companies have the .50 caliber (some the old bright barrel); the other half have the more recent .45 caliber. These arms are generally in good condition and seem to be well cared for. At present, however, companies of the same regiment have arms of different

caliber—a condition likely to lead to mistake and disaster. It would be far better could the whole force of the State have arms of the same caliber. If this is not practicable, such transfers of arms should be made as will result in each regiment having the same caliber for all its companies.

EQUIPMENT.

Except the haversack, the equipment of the Iowa National Guardsman is identical with that of the United States soldier—the McKeever cartridge-box, canteen, and blanket-bag.

CLOTHING.

The State of Iowa allows to each enlisted soldier of its National Guard \$4 a year for clothing. On this pittance he is expected to provide himself with full and undress uniform exactly like that of the United States soldier (except the buttons). This excessive economy is unworthy of a great and wealthy State. Men who give their time, zeal, and energy in fitting themselves for the defense of the State, in whose service they may at any time be called on to jeopardize or even sacrifice life, should not be required to go into their pockets to enable them to present a decent appearance. Many of the men are laborers, who are unable to afford any addition to the mite granted by the State.

The money allowed for clothing is paid by the State into the hands of the captain on the orders of the men. This gives opportunity for petty swindling by any captain mean enough to resort to it. I questioned the captain of a specially dilapidated company, "How is it that your company appears in such miserable rags of clothing?" "Oh, that," he replied, "was the other captain; he got all the money, bought this clothing, and then skipped." The clothing was the coarsest shoddy, ragged and patched, not worth one dollar the suit.

The United States furnishes to each infantry soldier during his five years' enlistment about \$180 worth of clothing. The State of Iowa furnishes each infantry soldier during his five years of enlistment just \$20 for clothing. It is not even suggested that the State attempt to emulate the prodigality of the National Government, but it should furnish *in kind* to each and every man of the rank and file a complete full dress and undress suit of uniform, including helmet, forage-cap, overcoat, and not less than two blankets. These troops are liable to be called out for the suppression of riot or disturbance at any season of the year and in all sorts of weather. With but one blanket, and no overcoat, the mortality resulting from exposure to severe weather is more to be feared than the bullets of rioters. The uniform issued should be in every respect identical with that issued to United States troops. Many of the wealthier companies are most gaudily equipped in dress, some having not less than three complete uniforms. There is no objection to this. Vanity is a large ingredient in manhood, and history shows that dandy soldiers are habitually good soldiers. Let them appear at their homes or when traveling about the country in any fancy uniform they may choose to adopt, but permit only the United States uniform to be worn on real duty or in an encampment with other troops.

DISCIPLINE.

Discipline was fairly maintained in both encampments. Men ran the guards and spent the night in town, shirking duty next day on plea of sickness, but the general result was much better than could have been expected, and this is due more to the general tractability and sense of honor of the men than to any fear of punishment.

Section 31 of the military code of Iowa provides: "Every soldier absent without leave or sufficient excuse from any parade, drill, or encampment shall be fined \$2 for each day of such absence, and for any unsoldierly conduct at drill, parade, or encampment he may be fined not more than \$10, such fines to be collected by civil suit; and all suits for the collection of fines shall be brought in the name of the State of Iowa for the use of the company to which the soldier fined belongs, *but in no case shall the State pay any cost of such suits.*" That "but" settles the question of the enforcement of disciplinary measures. No officer is likely to bring suit against an enlisted man for delinquencies when that officer is himself liable to be mulcted in the costs.

Discipline is the subordination of all inferior wills to the will of the superior, together with the means necessary to attain that end, necessarily including punishment. When punishment of the insubordinate, refractory, and disobedient element can only be attained as laid down in the code, it is very certain that it will not be attempted.

GUARD DUTY.

A grand guard was mounted every morning at each encampment, consisting of one captain, officer of the day; one lieutenant, officer of the guard; six non-commissioned officers and about sixty privates (sentinels and orderlies). As might be expected from

companies habitually isolated and without opportunity for gaining experience in this duty, there was great ignorance as to forms and details. The disposition to obey orders was apparent in the zeal of officers and in the conduct and general vigilance of sentinels, but the time authorized by law for the duration of the encampment is entirely too short to enable either officers or enlisted men to gain more than the merest smattering of this most important duty. The officer of the day should have been a lieutenant-colonel or major, the officers of the guard a captain and not less than two lieutenants. By their united efforts better progress in the instruction of the sentinels could have been made.

TARGET PRACTICE.

There is no attempt at target practice as it is understood in the United States Army. The State allowance to each company is but one thousand cartridges a year, which, if distributed among all the enlisted men, would give each but two or three shots in the year. Recognizing the uselessness of this as practice, the present custom is to make up teams of six men from each company on the principle of the "old time" shooting matches, the men known to be the best shots being selected for the teams. During the encampment these teams shoot in competition with each other, the team making the best score winning a prize.

The company allowance of cartridges is expended in preliminary practice and in the final contest by these teams, the consequence being that the only "target practice" is had by those men of each company who least need it. The large majority of the men get no practice whatever. I recommend that this mode of practice be discontinued (if no more cartridges can be issued), and that in lieu of the present allowance of ball-cartridges an equal amount of money be expended on blank-cartridges to be used in volley and file firing, to inure the men to flash and recoil.

ATTENDANCE.

The aggregate total of each brigade is about eleven hundred and fifty; the aggregate total present in each encampment was about one thousand, a very large percentage, when the fact is considered that these men belong to every walk of civil life, many being engaged in business whose demands may at that time be imperative. But the attendance on drill was not what it ought to have been. In their anxiety to make a good appearance many of the captains detailed their least instructed men for guard or excused them from drill entirely. One company, with fifty-one men in camp, brought on company drills a team of two sergeants and sixteen privates; another company, with forty-five men in camp, drilled only sixteen to nineteen men. Many of the companies were so small that in equalizing for battalion drill the colonels were obliged to reduce all companies to four sets of fours, or sixteen men in ranks.

The object of the encampments is not show but instruction, and when the State pays transportation, subsistence, and *per diem* for a certain number of men composing a company, all, except the sick and those detailed for guard or other important duty, should be required to attend all drills for the benefit of that instruction.

ENCAMPMENTS.

The capacity for receiving and profiting by instruction developed by the Iowa National Guard in the few days of camp is the best evidence of the excellence of its material, but the law-making power of the State makes a grave mistake when it assumes that any very great real or permanent benefit can be effected by an encampment of five days. All of the first day is occupied in getting into camp; part of the fifth day in breaking camp; thus reducing the actual working time to less than four days. A soldier is not born; he must be made, at a greater or less expense of time and patience.

The companies of Iowa are isolated; each captain has his own ideas of tactics and instructs in his own way. The object of the encampment is to unify these teachings; to bring all the companies into one uniform mode of conduct and action; to impart to captains and guides perfect knowledge of their duties when consolidated into battalions; and, finally, to educate these battalions until they can be perfectly handled by the brigade commander. This cannot be done in four days. Assuming that each company comes on the ground fully instructed in all company movements (which is far from being the case), it will be a remarkably good colonel who can get his battalion in shape to be easily handled in a week's time.

For the use to which the Iowa National Guard is likely to be put within the next few years, battalion organization and battalion movements are of paramount importance. I would recommend, therefore, that the law be so changed as to require the yearly encampments to be of not less than ten days' duration. The first week and the morning

drill hours of each working day during the encampment should be devoted exclusively to instruction in battalion movements. The evening drill hours of the last two or three days should be given to instruction in brigade movements; this last for the instruction of the colonels and general staff officers, and to give to the whole command an idea of warfare and a realizing sense of the necessity of drill.

There should be no stated company drills at these encampments, each company being expected to be already perfect in all company movements. If a company wishes to show its perfection in company exercises, or should a captain and company be too grossly ignorant to be allowed a place in the battalion, their drills should take place outside the regular drill hours, and in the latter case the colonel should be authorized to relieve the captain and place some competent instructor in charge of the company.

ARMORIES.

Section 41 of the military code of Iowa reads as follows: "There shall be allowed annually to each company for armory rent, fuel, lights, and like necessary expenses the sum of (\$50) fifty dollars."

There is scarcely a town in the State of Iowa in which a suitable room can be rented for the small sum authorized by law. The consequence is that nearly every company is obliged to assess its members not only for part payment of rent but for all incidentals.

Four-fifths of the Iowa National Guard are engaged in business or labor that occupies most of their daylight hours. Nearly all drills are had by night, between the hours of 9 and 12. Some of the armories are up one or more flights of stairs, in frail buildings, where the cadenced step is dangerous and double time prohibited. In summer moonlight nights are utilized to great advantage for company movements, but in winter, bad weather, or dark nights no instruction except in the manual can be given. How they do so well under such disadvantages is a marvel.

"The laborer is worthy of his hire." If the State of Iowa cannot afford more clothing allowance and more armory rent it would be better to cut down its National Guard to such number as can be properly and fully cared for.

There should also be provision made for the inspection of the companies at their armories not less than once a year by the inspector-general of brigade, and in the isolated condition of companies he should not only be inspector but instructor, correcting all errors and abuses and giving information on all points. Each colonel of a regiment should also be required to visit every company of his regiment at its armory at least once a year to witness its drill, inspect its books, uniform, arms, &c., and make report to the adjutant-general, detailing the exact condition and value of each company. The expenses of such inspection should be paid by the State.

OTHER INCIDENTALS.

I. The State should make provision for furnishing colors and flags for markers and general guides to regimental organizations. These must now be provided by the private purse of the colonel, the charity of citizens, or the patriotism of ladies.

II. Each encampment had a daily concourse of visitors, from five to twenty thousand persons. Among them were many prominent citizens of the State, many officers of the other brigades, many persons to whom honor and attention were due from brigade and regimental commanders. The duties of hospitality were necessarily a serious drain upon the private means of these officers. These encampments are for the benefit and greatly to the benefit of the State, and it should assume the duty of host by providing generals and colonels with an extra sum of money sufficient to cover their outlay in necessary entertainment.

III. Some adequate allowance should be made to officers for reimbursement of the expense to which they are put in providing themselves with uniform. Each line officer is obliged to expend from fifty to seventy-five dollars, each field officer from seventy-five to one hundred dollars. However capable a man may be to command a company or regiment, his acceptance of a position of command must depend on his pecuniary ability to supply himself with the necessary uniform. Under the present system regiments and companies are restricted in their choice of officers to those who have means. The door to honorable promotion is closed to the poor man.

IV. There should be some provision for the immediate discharge of incapable officers. The encampments gave each colonel opportunity to know his material. Let each be called on for a report of incapables; let these be ordered before a board, and if found incapable vacate their commissions. With such material as Iowa has to choose from, its National Guard should be second to that of no State in the Union. Its fault is an amiable laxity that permits "the boys" to select their own commander however incapable. One year

of vigorous action on the part of the authorities will result in the inferior companies giving place to others of ambition and action.

I had no means of verifying the assertion, but I was told that there are not less than a hundred towns in Iowa each eager to have a company in the National Guard. Such emulation gives the State such power that its militia ought to be second to none. If a company on fair trial fails to come up to the high standard that ought to be fixed, disband it and give its arms and equipments to a company of some other aspiring town. Each company will then understand that its existence depends on its knowledge and efficiency, and will labor to gain knowledge and make itself efficient.

STAFF.

The duties of the brigade staffs were performed very efficiently. The assistant adjutant general, chief quartermaster, and chief commissary of brigades were ubiquitous, performing their duties admirably in spite of interruptions and constant interrogation. The work of each department was very thoroughly performed. I noticed, however, that the beef issued was so young and inferior that it would not have been accepted at any post of the regular Army. I spoke of it to the commissaries of both brigades, and was met by the assurance that the men would not eat old beef. There were, however, in each camp a great many cases of diarrhea, which I thought attributable to the unripe beef.

IT IS RECOMMENDED—

- I. That the time of encampment shall not be less than ten days.
- II. That the State issue outside dress and undress clothing, overcoat, and two blankets in kind, identical with the uniform of United States troops, and that no other uniform be permitted to be worn whenever the troops are called out by the State.
- III. That but one caliber of arms be issued to a State. If that be impracticable, then arrange to have all companies of a regiment armed with same caliber.
- IV. That all officers should be paid sufficient to enable them to buy uniforms.

CONCLUSION.

There is no better material for soldiers in the world than is furnished by the State of Iowa. The gross deficiency of some companies is due to their isolation, to the laxity of the code, and to an indisposition (amiable, but unmilitary) on the part of the higher authorities to interfere with them. There are companies in the Iowa militia that in mechanical perfection of drill are the peers of any company in the world. There are other companies so deficient as to be utterly unworthy the name of soldiers. The State has full power to rectify this. A good army cannot be created by the personal popularity or political influence of its officers. It must be above (or below) these influences. Work, knowledge, ability, must be its pass-words. These, backed by proper legislative action, will insure to the little army of Iowa a proud place in the grand army of the States.

Even in this official paper I cannot refrain from the expression of my full appreciation of all the kindness and courtesies heaped upon me during my visit to these camps by all concerned.

To General Wright, General Beeson, and their staffs I offer my very sincere thanks, not only for their personal kindness and hospitality, but for the full opportunity afforded me for thoroughly acquainting myself with the working of the machinery of the Iowa National Guards.

I am, sir, very respectfully, your obedient servant,

RICHARD I. DODGE,
Colonel Eleventh United States Infantry.

FORT SNELLING, MINN., August 12, 1886.

The ADJUTANT-GENERAL UNITED STATES ARMY,
Washington, D C.:

SIR: In compliance with instructions contained in your communication of June 16, 1886, I have the honor to submit the following report of the observations made by me of the condition of the Illinois State National Guard, at Camp Lincoln, Springfield, Ill.:

Having arrived on the morning of the 17th of July, I reported to Brig. Gen. Charles Fitz Simons, commanding the First Brigade, and ascertained that the troops which were to take part in the encampment from July 17 to 23 had not yet arrived, but that all the command would be there that afternoon.

The camp was located northwest of the city of Springfield, adjoining the city limits, on grounds consisting of 160 acres recently purchased by the State for that purpose. The ground is 1 mile long and a quarter wide. On the north side of grounds is located one of the best target ranges, from 100 to 1,000 yards, I have ever seen. Great credit is due to the officer, Col. J. A. Shafer, general inspector of rifle practice, who personally superintended the work, for so promptly getting the grounds in condition for the encampment. Shelter was provided for the markers, and many other minor details were looked after and provided which would be well if we had on the Army ranges. The camp was located next to the range, in a grove of timber, mostly oak, in which the tents were located. The parade and drill ground were next to the camp, and were too narrow for the number of troops contained in the first brigade, especially when formed in single rank (the usual way of forming), and did not present room enough for promptly maneuvering it.

Five wells were dug near the camp, and the water main from the city was also extended to the ground, by which water was supplied for drinking as well as for bathing purposes, a bath house having been erected for the officers and a pool for the men. The latter was not the success it was hoped it would be by those who originated the scheme, owing to the banks washing when the water was agitated. This can, and no doubt will, be remedied before the next annual encampment. Sinks for the officers and men were frame building, and sewer was connected therewith; they were too far from the camp of one of the regiments.

The following extract from the morning report of the First Brigade for July 21, 1886, which will not materially differ from other days of the encampment, shows the strength, present and absent, of this brigade.

Troops.	No. of companies.	Present.		Absent.		Total present and absent.		Per cent. of men absent.
		Officers.	Men.	Officers.	Men.	Officers.	Men.	
General staff.....	.....	9	2	1	.....	10	2	.....
First Infantry.....	8	26	306	5	119	31	425	27+
Second Infantry.....	8	18	220	9	105	27	325	31+
Third Infantry.....	8	23	333	7	127	29	460	27+
Fourth Infantry.....	8	29	299	5	141	34	440	32+
First Cavalry.....	4	13	220	5	68	18	288	23+
Light Battery D.....	1	3	44	1	33	4	77	42+
Total.....	37	121	1,424	33	593	153	2,017	.....

Fifty per cent. of the absentees had leave of absence; the remainder were absent without leave. Three officers absented themselves without authority. No doubt a large number of the absentees staid away for fear of losing their positions, but would have been present had there been any prospect of danger; then the place of encampment might have had its effect on some, being 185 miles south of Chicago, where most of this brigade reside.

CAMP EQUIPAGE.

There was an abundance of canvas supplied by the State. Wall tents of the regulation size and material, floored, were provided for officers and men at the rate of one for every five of the latter. The field officers had larger tents, which were also floored. The tents had been pitched by hired labor previous to the arrival of the troops—small parties from each regiment, which had preceded their commands, were on hand to look after their property. Bed-sacks filled with straw were issued by the quartermaster's department of the State. One blanket was also issued to each. Frame buildings were used for storage.

SANITARY CONDITION AND POLICE.

The health of the command was good during the encampment, in fact so good that no brigade hospital tent was put up. The regimental surgeons treated most of the cases of illness that occurred. Quite a number of men fell out of ranks at the different parades, but the brigade surgeon, J. W. Streeter, informed me that none of the cases proved fatal. The weather was very hot and grounds dusty, no rain having fallen in the vicinity since the 15th of June. The police of the camp, especially the First Infantry, Second Infantry, First Cavalry and Light Battery D, was very good.

DAILY CAMP ROUTINE.

Under orders from brigade headquarters, company or battalion drill was held in the forenoon from 9 to 11.30. Target practice was also had in the morning and afternoon. I think better results might have been obtained had the men been ordered to the range earlier. Dress parade for battalion and brigade was held daily from 5.45 to 6.45. All calls were first sounded from brigade headquarters, and were then taken up by the musicians of the separate commands. No calls except those from brigade headquarters were permitted to be sounded, except for cavalry and light artillery.

MESSES.

The brigade staff took their meals together at a mess of which the caterer was the commissary of subsistence, and food of the best quality was served, prepared by servants brought from Chicago for the purpose. The regimental quartermaster of each regiment also kept a mess for its field and staff. The company officers, as a rule, messed with their companies. The State furnishes each officer and man with a ration which is much greater than that furnished by the United States; it includes potatoes, eggs, butter, canned fruits, and sirup. This ration was increased by purchases by the men at their own expense, especially in the First Infantry, Second Infantry, Light Battery D, and the First Cavalry. As a rule, the cooking was done by hired help on gasoline stoves. There were some exceptions to this in the Third and Fourth Infantry, which used sheet-iron stoves. Offal was placed in barrels and hauled away daily. Ice in abundance was supplied for the preservation of meat, cooking and drinking purposes. Cooking utensils, table ware, &c., were found clean, and only some few men in one of the regiments (the Fourth Infantry) complained of insufficiency of food. This was caused, I think, by some bread that was not properly baked.

INSTRUCTION.

Some regiments of this brigade, especially the First Infantry, Second Infantry, and First Cavalry, were very proficient in their drill, the officers as well as the men taking great pains to do their very best. Few mistakes were observed in the above command, and they were more the fault of the officers than the men. The cavalry drilled on foot.

The Third and Fourth Infantry improved very much while in camp. These regiments are not assembled except at the annual encampments, which only last six days. The wonder is that they do so well.

The light battery (D), commanded by Maj. E. P. Tobey, was drilled daily in the various evolutions; their horses were hired for the occasion and brought from Chicago; their drill was very creditable; they have four 12-pounder guns, which belong to the Citizen Association of Chicago; they also have a Gatling gun, with which they made some very fine shooting at the target. There was very little skirmish drill in this command, which is greatly to be regretted.

GUARD DUTY.

A police guard was mounted daily in each regiment, besides a brigade guard. The latter was under a field officer of the day. In the regimental guard mounting many errors were at first committed, but they were soon corrected, and before the encampment was over their mistakes were comparatively few.

Guard duty was very well performed. The men were orderly in camp, and I saw very few cases where sentinels failed to pay proper respect to officers when passing. Off duty, when meeting officers, they were not so careful.

PARADE.

There was a daily dress parade of the battalion, followed by a brigade dress parade in line of masses. In the former there was some confusion caused by each battalion having their bands "sound off" at the same time.

MILITARY APPEARANCE.

I made no formal inspection of this command, but I witnessed their company and battalion drills, and at the request of General Fitz Simmons I accompanied him at all reviews, parades, &c. The fatigue dress, as worn in the United States Army, has been adopted, with State buttons and white helmet. In company with Colonel Durand I inspected the quarters, kitchens, and mess-tents, which (with few exceptions in the Third and Fourth Infantry) were found in excellent condition.

ARMS AND EQUIPMENTS.

All the infantry are armed with the Springfield rifle, caliber .45; but they are not all provided with the safety-notch. The cavalry are armed with the light cavalry saber and Springfield carbine, caliber .45. The McKeever cartridge-box and black leather belts were used. Blanket-bags, haversacks, and canteens have been issued to each man.

REVIEW.

On Tuesday, July 20, Governor Richard J. Oglesby, accompanied by the adjutant-general and inspector-general of the State and a number of his aides-de-camp, arrived in camp, escorted by the Second Infantry, and a salute was fired in his honor. After a casual inspection of the camp, the brigade was formed in line (single rank) for review and inspection. The men were quite steady in ranks as the governor rode down the line. The march in review was very good, and when his excellency left camp he expressed himself as well pleased with the National Guard of Illinois, of which he is commander-in-chief.

GENERAL AND STAFF DEPARTMENTS.

The brigade commander, Brig. Gen. Charles Fitz Simons, a soldier of considerable experience during the war of the rebellion, was most untiring in the performance of his duties, and was ably assisted by an intelligent staff.

The officers and men receive \$1 per day when in camp, but when called to actual service for the suppression of riots and other field service they receive the same pay as officers and enlisted men in the United States Army. The men are paid upon muster-rolls prepared by the company commanders. This roll is certified by the adjutant-general and approved by the governor. A warrant is then drawn by the auditor upon the State treasurer, and the amount paid to the company commander for the men of his command.

TARGET PRACTICE.

Considerable interest was taken in target practice—distances fired 100, 200, 300, and 500 yards. As heretofore remarked, there was a most excellent range, with all the appliances. Lieut. Col. Thomas C. Clark, inspector of rifle practice of the brigade, had charge, assisted by the inspector of each regiment.

I desire to express my obligation to General Fitz Simons and the gentlemen composing his staff and to the regimental and battery officers for the courtesy and hospitality shown me while in camp as well as in Chicago.

The Second Brigade Illinois National Guard, Brig. Gen. Jasper N. Reece, commanding, went into camp at Camp Lincoln, on the same grounds occupied by the First Brigade, from the 2d to 9th of August, 1886. I reported to the general on the morning of the 2d, but the troops were not all there until late that day.

The following extract from the brigade morning report for August 4 will show the strength, present and absent, of the command:

Troops.	No. of companies.	Present.		Absent.		Total present and absent.		Per cent. of men absent.
		Officers.	Men.	Officers.	Men.	Officers.	Men.	
General and staff	8			2		10		
Fifth Infantry	12	30	422	6	146	36	568	25+
Sixth Infantry	8	25	283	9	67	34	350	19+
Eighth Infantry	12	52	548	5	95	47	643	14+
Light Battery A	1	3	41		20	3	61	32+
Chicago Light Infantry	1	3	52		2	3	54	3+
Total	34	111	1,346	22	330	133	1,676	

The above extract does not show the number of officers and men absent without leave. It will be observed that the per cent. of absentees from this brigade is very small, except in the Fifth Infantry and Light Battery A. In the Eighth Infantry 36 men out of 95 reported absent would have been discharged but for some informality in application.

INSTRUCTION.

No two companies of this brigade are from the same locality. It is therefore impossible for the colonels to assemble them for battalion drill, except at the yearly encampment; consequently errors were not uncommon. Field officers as well as the line officers very often gave improper commands. In fact, the mistakes made were more the fault of the officers than the men; while this was the case during the first days of the encampment, great improvement was made in all the battalions. Every officer whom I met was anxious to have his errors pointed out to him. The battalion drills lasted from 10 until 11.30 a. m., having been preceded by company drills of one hour. Some of the regiments, particularly the Sixth (Colonel Clendenin), showed great proficiency in skirmish drill, both by battalion and company. While the other two regiments had some skirmish drill, they did not put in so much time as they should have done. No brigade movements were made, I presume, because the drill-ground was too small.

The drill of Light Battery A was very good, both mounted and dismounted. The officers and men were young and well qualified to make excellent soldiers. The horses were hired for the occasion and did remarkably well. It is due to the officers and men of this brigade to say that many changes have taken place in the *personnel* of their commands since their last encampment. In one regiment (the Fifth Infantry) fourteen officers have been elected since January 1, 1886. In the Sixth Infantry, five captains out of eight have been commissioned since January 1, 1886, while in the Eighth Infantry quite as many changes have taken place as those noted in the other regiments. The change in the enlisted men has also been very great; 25 per cent. would scarcely cover it. Two captains in the commands were private soldiers a few months ago.

GUARD DUTY.

Each regiment had its own guard. The light battery furnished the headquarters guard. A great many minor errors were made by the officers of the day as well as the officers of the guard at guard mounting, the old officer of the day saluting while the guard was passing in review. Some officers of the day would stand at parade rest while the guard was marched in review. In one case (in the Fifth Infantry) the officer of the guard failed to take command of his guard after the review and marched about 100 yards out of his way, where he was finally overtaken by the adjutant and returned to his proper place. It was evident that this most important duty had received but little attention. Sentinels were not properly instructed by the officers and non-commissioned officers of the guard, and they were often seen sitting down on their beats; they usually came to attention and saluted when an officer passed, but off duty they were often very negligent about saluting. Company officers should give this subject more attention.

PARADES AND REVIEWS.

On August 5 his excellency Governor Richard J. Oglesby arrived in camp and was received with the authorized salute, and after witnessing some very satisfactory practice with the Gatling gun under Captain Denny the troops were reviewed. They were formed in double ranks, and were quite steady both in ranks and on the march. In passing the reviewing officer one of the regiments was not brought to a carry, and there was too much distance between some of the subdivisions. The leading regiment after passing the reviewing officer was thrown into column of fours, which delayed the march of the troops in its rear.

The dress parades by battalion were in double rank, and took place every evening during the encampment. There was no confusion by all the bands "sounding off" at the same time. Commencing on the right of the parade ground each regiment finished its parade before the one next on its left commenced. While on the whole these parades were well conducted, many errors were made by field, company, and non-commissioned officers. The field and company officers would use the word "battalion" and company when there was no necessity for it. The first sergeants in reporting, especially in the Fifth Infantry, would say company (&c.) "all present and accounted for." Then there were some officers who would persist in presenting saber if the colonel happened to give the command "present arms" during parade.

Brigade dress parade invariably followed the battalion parades. In passing in review the regiments sometimes marched past the reviewing officer with arms at a "right shoulder." Battalion commanders did not always place themselves on the right of the reviewing officer while their regiments marched past. The "march past" the reviewing officer was very good, except some few of the subdivisions lost too much distance.

ARMS AND EQUIPMENTS.

The Springfield rifle, caliber .45 (some of which do not have the safety-notch), black belts, McKeever cartridge-box, and bayonet-scarbards are provided for the infantry. One company in the Eighth Infantry was short some bayonets and bayonet-scarbards. The captain claims that they had never been supplied. They are also provided with blanket-bags, canteens, and haversacks. Light Battery A had four 3-inch rifle guns and caissons. The guns belong to the organization. They also had a Gatling gun, caliber .45, with which they did some very fair firing at the target at ranges from 100 to 1,000 yards.

TARGET PRACTICE.

Target practice was under the supervision of Lieut. Col. James M. Rice, inspector of rifle practice of the brigade. A more zealous and painstaking officer could not have been selected. A description of the range has already been given in my report of the First Brigade, except that I omitted to say there were seventeen "Laidley" revolving targets on the range. Markers were hired for the occasion, and communication by telephone was kept up between the firing point and the markers.

A battalion of four companies occupied the range; four in the forenoon and four in the afternoon, each under command of a field officer, assisted by the regimental inspector of rifle practice of the regiment to which the troops belonged. Great interest was taken in this matter from the commanding general down.

The following rules determined the classification: Those who make 60 per cent. in one score of five shots at 100, 200, and 500 yards are classified as marksmen; those who make 60 per cent. in one score of five shots at 100 and 200 yards are classified as first class; those who make 60 per cent. in one score of five shots at 100 yards constitute the second class; those who have had practice during the "target season," 1st July to 1st November, at 100 yards, are as third class; and all officers and men, whether present or absent, who fail to practice during the "target season" are put in the fourth class.

The following is the figure of merit of the regiments in this command: General and staff, 26; Fifth Infantry, 30.60; Sixth Infantry, 32.48; Eighth Infantry, 34.79. Figure of merit for the brigade of 32.04 against 21.41 for the year 1885.

Last year (1885) this command had 113 marksmen; this year (1886) they have 195. This shows great progress, and can still be increased by a little more attention to aiming drills and gallery practice.

GENERAL AND STAFF.

I found General Reece (like General Fitz Simons) to be a veteran of the late war, and one who has been connected with the Illinois National Guard for the last ten years. The general is very zealous in the discharge of his duties, and has a proper appreciation of the responsibilities connected with his rank. He has a most excellent staff. Most of the hard work fell upon the assistant adjutant-general, who made up his own papers, returns, &c.

INSPECTION.

Sunday, August 8, I made an inspection of the command, which lasted over four hours. Col. E. B. Hamilton, inspector-general of the State, was associated with me in this duty. The colonel is a gentleman of large experience in military matters, having served during the war of the rebellion, and for several years in the National Guard of his State (Illinois.)

The Fifth Infantry, Col. J. H. Barkley, commanding, was first inspected. The arms, except in the following companies, were in fair condition only: Companies B, C, and one from Delevan were in excellent condition. Accouterments in good condition. Police of camp, including quarters, kitchen, &c., very good.

Sixth Infantry, Col. William Clendenin, commanding. Arms and accouterments in fair condition. The companies from Monmouth, Rock Island, and Galesburg were the best. Police of quarters, kitchen, &c., very good.

Eighth Infantry, Col. R. M. Smith, commanding. Arms and accouterments in fair condition. Company H was in excellent condition. Police of camp, kitchen, &c., very good. One company in this regiment complained that they had no blankets. It seems that blankets had been issued to them, but they had been transferred (without proper authority) to another company during the recent troubles at East Saint Louis, where this regiment performed most excellent service during the riots at that place. I believe some companies of the Fifth and Sixth Infantry were also engaged in preserving the peace at the same time and place.

Light Battery A was next inspected. Arms and accouterments in very good condition. Police of quarters, &c., good.

The Chicago Light Infantry was the last inspected. Arms and accouterments in a fair condition. Police of camp good. I saw this company drill (several times) during the encampment, which was very good. Officers and men are colored.

The enlisted men of this brigade, like the first, wore blouse, pants, and white helmet. All wore the same uniform, and (notwithstanding the dust which seemed to permeate everything in the way of clothing) presented a very creditable appearance. More care should be taken, however, in the selection of recruits; one or two men in a company with poor *physique* destroy, to a certain extent, the good appearance of the whole. No complaint of insufficiency of food was heard in this command.

MILITARY COURTESY

was not, as a rule, well observed. This was not from disrespect to the officers, but in consequence of not having been properly instructed.

ORGANIZATION.

The Illinois National Guard consists of seven regiments of infantry, of not more than twelve and not less than eight companies to a regiment. Only two regiments (the Fifth and Eighth Infantry) have twelve companies organized. There are four troops of dismounted cavalry and two batteries of light artillery, all formed in two brigades, and the whole is limited by law to 4,000 officers and men, who serve for three years. The governor is the commander-in-chief. The adjutant-general is the chief of staff, and is the only officer who draws a yearly salary. He is *ex officio* quartermaster and commissary-general. The position is well filled by Brig. Gen. J. W. Vance, who is well known for his fine executive abilities, and has an able assistant in Col. Theodore Ewert, who is assistant adjutant-general of the State.

I had an opportunity of examining their records, and found them in excellent condition.

REMARKS AND RECOMMENDATIONS.

The National Guard of Illinois is composed of some of its best citizens, which accounts for its being in such good condition. The governor, a veteran of two wars, takes great pride (as well he may) in looking after their interest in many ways. The public-spirited citizens of Chicago, Springfield, and in fact of the State generally, also take much interest in the guard.

In accordance with your suggestion, I would respectfully submit the following recommendations, which, if adopted, would, in my opinion, greatly increase the efficiency of the National Guard of this State:

(1) That more attention be paid to the "school of the soldier," especially the "setting-up exercise" and company drill. The State pays for armories for each company and regiment, which could be utilized for these movements as well as gallery practice. That the colonel of each regiment instruct (or cause to be instructed) his officers in the "manual of the sword." If at dress parade all the officers would return their swords in the same way, face inward and step off when the adjutant does, their parades would look much better.

(2) That, as a rule, the resignation of no officer of the guard, especially of the captains of companies, be entertained during the four months immediately preceding the annual encampments. This (to a certain extent) would prevent inexperienced officers from commanding companies on such occasions.

(3) That at least two reserved companies be mustered in in the district where each regiment is now serving, with a view of being absorbed in the permanent organization should one or more companies fail to come up to the required standard. This rule has been adopted in Minnesota, and works well.

In concluding this report, I wish to express my sincere thanks to Governor Oglesby, General Vance, Colonel Ewert, and General Reece and staff for the courtesy and hospitality shown me during my tour of duty with the National Guard of Illinois.

I am, general, very respectfully, your obedient servant,

GAINES LAWSON,
Captain Twenty-fifth Infantry.

BURLINGTON, VT., August 28, 1886.

The ADJUTANT-GENERAL, UNITED STATES ARMY,
Washington, D. C.:

SIR: In compliance with paragraph 2, Special Orders, No. 171, Headquarters of the Army, Adjutant-General's Office, Washington, July 26, 1886, I have the honor to state that I proceeded to the camp of the National Guard of the State of Vermont, at Burlington, Vt.; remained in camp with the troops during the entire encampment, from August 24 to 28, 1886, inclusive; and to submit the following report:

The site chosen for the camp was in Burlington, about twenty-five acres of open ground, and well adapted to the purposes in view. A suitable tent, next to the colonel's (commanding), was assigned to me, and I lived in camp with the troops. Every facility was offered me to become thoroughly acquainted with the troops assembled, their arms and accouterments, their manner of doing duty, and their ideas on the subject. Also every courtesy was extended to me, and a marked desire to have a Regular Army officer in camp was evidenced on all sides.

The National Guard of the State of Vermont, armed and equipped, consists of the First Regiment and First Separate Company (infantry) and the First Light Battery (artillery); total commissioned officers, 51; total enlisted men, 606; aggregate, 657.

By 4 p. m. August 24 there were assembled in camp the following troops:

Troops.	Officers.	Men.
First Regiment (ten companies).....	31	456
First Separate Company.....	3	47
First Light Battery.....	7	73
Total	41	576

Although there is no brigade organization, there is a brigadier-general, having general command, and his usual staff.

The interest manifested by both officers and men can be partially seen from the fact that out of the entire number actually enrolled in the State guard there were absent from the encampment but four staff officers, two company officers, and twelve enlisted men; and, as far as I could ascertain, the average percentage in camp each year is .95.

Shortly after the arrival of the troops in camp a guard was mounted, sentinels posted, company quarters and streets put in order, and the usual camp regulations and orders enforced.

The troops were encamped in the usual order, by companies, the light battery separate from the rest of the command.

DUTY.

The main duties required during the encampment by published orders were: For the infantry, guard mounting every morning, dress parade every evening, drills in the school of the company and of the battalion twice a day, company police, and officers' school every evening; for the artillery, stable duty, guard mounting, drill in the school of the driver by sections, by platoons, and by battery twice a day, also in the manual of the piece, and officers' school every evening.

GUARD DUTY.

A guard of two officers, five non-commissioned officers, and forty-eight men was mounted every morning, and sixteen posts established, thus enabling as many men as possible to gain instruction in guard duty. Guard mounting was well and carefully conducted, the details being assembled the day before and carefully instructed and drilled in the ceremony of guard mounting. Much attention was paid to the instruction of the officer of the day and the officers and non-commissioned officers of the guard in their several duties; and they, in their turn, carefully instructed their sentinels, and guard duty, as a whole, received that attention which it deserves, and was, in the main, satisfactorily performed, taking into consideration the attending circumstances and the short duration of the encampment.

The sentinels seemed to appreciate their position and responsibilities, and endeavored to carry out, to the best of their abilities and knowledge, their orders and instructions. Were more time allowed for this encampment, much valuable instruction could be given and more practice had in the duties of guards and sentinels, with results conducive to the proper performance of this most important duty. In this camp many men had no chance to go on guard.

The same may be said with reference to guard duty in the light battery.

DRESS PARADE.

There was a marked improvement in dress parade each night, showing the advantage to be gained by a little longer stay in camp.

DRILLS.

Drills in the school of the company and battalion were held twice a day, each drill lasting about two hours. Much attention was paid to skirmish drill, both company and battalion, and these, as well as the other drills, were carefully and well conducted, both officers and men showing a fair amount of knowledge of their duties. I think the proficiency in this respect rather remarkable, considering the little experience these troops have had. The majority of the companies have small armories, where they can have but little drill other than in the manual, and they have satisfactorily but one drill before coming into camp, and that is on one day in June, on which, according to the State laws, each company is obliged to turn out and devote that day to drill. The remainder of the drills is entirely optional with the companies; many of them have a drill as often as once a week, but the attendance is below a fair average and the results are not satisfactory. From the proficiency shown in regard to drill, I cannot but believe that, with more opportunities and better facilities, these companies, from the spirit manifested, could attain a degree of excellence creditable to any military organization.

On the afternoon of the 26th the drill was the "riot drill," through the streets of Burlington. The instruction given was excellent, and the execution prompt and efficient.

A review for the governor took place on the afternoon of the 27th, and was followed by a sham battle. The review was properly and well gone through with, and the marching of most of the companies was very good. In the manual of the piece the drills showed that both officers and men were carefully and well instructed. In the mounted drills a rather remarkable degree of proficiency was shown, taking into consideration that the horses are ordinary team-horses gathered in from the surrounding country of Brattleboro', necessarily untrained for the work of a battery, and having drivers whose only experience is had on one day of each year, in June, and during the annual encampment. The movements in these drills were well conducted, and showed an efficiency as surprising as well as worthy of the highest commendation.

POLICE.

Not that attention which it merits was paid to this duty. The company police was satisfactorily performed, but no attention was paid to the general police. The company quarters and immediate surroundings were well policed by each company, but there was no general police, and the general parade and surroundings, outside the immediate vicinity of the companies, were not looked after as they should have been. This was particularly noticeable in the vicinity of some of the mess-tents, where things of every description were thrown out promiscuously, the ill effects of which would have been perceived had the command been obliged to remain there any length of time. Some of the sinks also needed more looking after. The battery surroundings, streets, and stable were well policed and carefully looked after.

OFFICERS' SCHOOL.

The officers assembled at the colonel's tent from 8 to 10 in the evening, and talked over the various duties they had to perform and movements in tactics. Much information can be gained in this way, and more uniformity in the performance of duty.

ARMS AND ACCOUTERMENTS.

I inspected each company, and consider the arms and accouterments unserviceable and very discouraging to the men into whose hands they are put. The rifle with which they are armed is the Springfield breech-loader, caliber .50, and has been in use by these troops some twelve years. Many of these pieces are without sights; the majority of them have some defect in the mechanism of the locks or breech-block, or both; many cannot be fired at all; and, as a whole, they might be considered as almost useless, or at least unreliable. Most of them are so rusty and fouled that I doubt if any of them could be fired with effect. Proper care does not seem to have been taken of them, but it must be said they have been long in use, are old and out of date, and the men do not take that pride in them which I am satisfied they would do were a more modern and better weapon placed in their hands.

The cartridge-boxes are the old-style carbine cartridge-box, and from age, if nothing else, are in bad condition.

Only two of the companies are provided with knapsacks, haversacks, and canteens, which they purchased themselves. The State has none serviceable with which it could supply its troops in case of need.

The battery has the old-fashioned light 12-pounder Napoleon gun, mounted on the regular field-carriage. There are four pieces and four caissons. They are in as good condition as these old pieces and carriages can be, but their time has passed. The harness is old, but great care is taken in its preservation, and it is in a serviceable condition. The same may be said of the horse equipments. The saddle-blankets are old and worn out, and new ones are much needed. The men are all supplied with knapsacks or valises, which are in a serviceable condition.

UNIFORM.

The companies and battery are provided with two sets of uniform, full dress and fatigue. With the exception of two of the companies and the battery, the uniform is of gray cloth, and well adapted to field service. The two companies above referred to and the battery are uniformed in blue, somewhat similar to our own service, and is also well adapted to use in the field. For use in the field I refer more particularly to the fatigue uniform.

The State allows \$13 to each man for his uniform, but the cheapest costs \$23, and the majority costs more, the difference coming out of the man's pocket; and yet the State claims the uniform. This causes much discontent.

QUARTERMASTER AND COMMISSARY DEPARTMENTS.

These departments are under the immediate control of the quartermaster-general of the State. At Montpelier are stored all the clothing, camp and garrison equipage belonging to the State, which are issued to the troops as occasion may demand, and afterward returned. In this respect I think the State is deficient. They are well supplied with suitable tents, and these tents are all in excellent condition; but they have little else that is serviceable and would be required if called into active service.

Four of the companies and the light battery have provided themselves with complete mess outfits, and are ready in this respect for active service. The remainder of the companies have nothing of the kind, and the State is not prepared to furnish them. The camp-kettles, bake-pans, &c., that are stored in Montpelier, and that are serviceable, are not sufficient to supply all the troops that might be called out, and the companies would be obliged to rely on their own resources, and in the suddenness of the moment might be considerably embarrassed. The knapsacks that are also stored there are all unserviceable, and, with the exception of two of the companies and the light battery, the men have no means of carrying their extra clothing and rations.

There are also no serviceable canteens, and only two of the companies and the light battery are provided with them.

Overcoats and blankets are issued for occasions and returned to the store-house. The overcoats are, as a general rule, unserviceable and unfit for issue; and the same may be said of the blankets; most of them are thin, old, and worn, and would give but little comfort. A new lot that I saw was a very fair blanket.

When in the annual encampment the companies make their own arrangements about messing, and each officer and man receives from the State \$2 per day for his subsistence. In this camp it was done by contract, by different parties, suitable mess-tents, pitched on the borders of the camp-ground, accommodating some one and others two or more companies. When called into actual service by the State all receive the same pay and allowances as in the regular Army, and the men are rationed in the same way.

The subsistence department proper has been brought but little into requisition, and it would be difficult for one to say how efficient it might be if called upon.

MEDICAL DEPARTMENT.

This department, though ably conducted, is poorly supplied, being without proper bedding, pails, wash-bowls, &c., and the necessary conveniences for the sick. It is not supplied with a complete set of surgical instruments for performing delicate or complicated operations, as might be required in active service. The department also lacks books of record, of reference, or United States Army text-books by standard authors.

BOOKS AND RECORDS.

The books kept by the companies and battery are a roster book and a kind of descriptive book. There is no morning-report book kept by any of the companies, nor is a guard-report book kept. A complete record of the regiment is kept by the regimental adjutant.

TARGET PRACTICE.

But little attention is paid to target practice. The facilities for a range are, with most of the companies, excellent, but the inferiority of the rifle, the difficulty in obtaining ammunition, and the absence of any provision for assembling the companies for such practice are discouraging in the extreme, and many of the companies have had none at all, and what little has been had by the others has been unsatisfactory.

There were no facilities for target practice in camp, and it would be difficult to find a suitable range for such practice on the average ground selected each year for the encampment. Were a permanent camping-ground established a rifle range could be fitted up and the usual facilities for practice during the encampment had.

DISCIPLINE.

The discipline of the command was good. Officers were attentive to their duties; exacted obedience from their men; and all orders, as far as I could observe, were cheerfully complied with by all subordinates, and executed to the best of their abilities. There were no disturbances of any kind to speak of in camp, and all orders and regulations seemed to have been faithfully adhered to. All calls were promptly answered, the absentees were few, and the formations for drill and other duty were very prompt.

FIRST REGIMENT.

This regiment is well organized, under efficient officers, but needs new arms and equipments. The men are earnest and painstaking in the performance of their duties, but naturally have no confidence in their pieces. Properly armed and equipped they would form an efficient body upon whom the General Government could rely, at any time, for actual service. The same may be said of the First Separate Company.

FIRST LIGHT BATTERY.

I think this battery deserving of special mention. Through untold difficulties it has been brought to its present efficient state by the untiring energy of its captain, and by the interest and energy of its officers and men, and also, it must be said, largely at the personal expense of the captain. So systematized is everything, that from repeated trials this battery can be horsed, manned, and ready for actual field service in two hours' time from the receipt of the order. This battery, provided with the new steel breech-loader, improved carriages and harness, would be invaluable to the General Government in its hour of need.

CONCLUSIONS AND RECOMMENDATIONS.

I think that both officers and men show a spirit that is highly commendable, but I do not think that they receive the proper support and encouragement.

For reasons which seem evident to me, and which I have tried to embody in this report, I have the honor to respectfully recommend:

That the infantry be furnished with the improved Springfield rifle, caliber .45, and with the improved cartridge-box, bayonet, and bayonet-scabbard; that provision be made by which the companies can be supplied with suitable knapsacks or haversacks and canteens, and with the necessary mess outfit for field service; that some provision be made for the purchase of uniforms by which the soldier will not be obliged to bear the greater part of the expense; that some arrangement be made by which all the companies can have more suitable armories, affording more facilities for drill and instruction during the winter months, and more than one day in the year be devoted to drill; that some provision be made and more attention paid to target practice; that a greater length of time, eight days at least, be required for the annual encampment; that the troops be marched into camp in heavy marching order, fully equipped for actual field service; that the light battery be furnished with the new steel breech-loader field-piece, the improved carriage and harness, and new equipments; that the medical department be supplied with the proper surgical instruments for performing delicate and compli-

cated operations as might be required in active service, with the proper bedding and other conveniences for the sick, and with the proper books of record, of reference, and text-books.

I am, sir, very respectfully, your obedient servant,

WM. H. COFFIN,
First Lieutenant, Fifth Artillery.

FORT ADAMS, R. I., September 21, 1886.

To the ADJUTANT GENERAL, U. S. ARMY,
Washington, D. C.

GENERAL: I have the honor to report that, in compliance with paragraph 9, Special Orders No. 115, dated Headquarters of the Army, Adjutant-General's Office, Washington, D. C., May 17, 1886, I visited the encampment of the Massachusetts Volunteer Militia at the places and on the dates designated by said special orders, and respectfully submit the following report:

The camp-ground at South Framingham has been described in detail for several years, the only change made during the past year being the erection of a one-story frame building for the use of the governor and his staff.

The First Brigade consists of three regiments of infantry, two of twelve companies each and one of eight companies; one company of cavalry; and one light battery of artillery. The total enlisted strength of this brigade is 2,002, with 150 commissioned officers; 83 per cent. of the former and 99 per cent. of the latter were present in camp.

The Second Brigade consists of three regiments of infantry, two of eight companies each, and one of twelve companies; one battalion of light artillery, consisting of two light batteries; and one battalion of cavalry, consisting of two companies. The total enlisted strength of this brigade is 1,958, and 157 commissioned officers; 82 per cent. of the former and 94 per cent. of the latter were present in camp.

The brigades encamped on the same ground; wall-tents were provided for all, and the camps were arranged as required by regulations. Printed orders prescribing the routine of duty, and practically the same for both brigades, were issued, and I think included all that could have been required of the men under the circumstances. The different camps and all the grounds were thoroughly policed every day, also the stables and the grounds adjacent.

The medical department was well administered, and, while I did not see for myself, the surgeon-general of the State, who was present in each camp, informed me that his department was well supplied with medicines and hospital supplies. The general health of the men in both brigades was very good.

No change has been made in the system of messing, and as the present plan seems to be satisfactory, it is not probable any will be made. I questioned the men freely on this subject, and am of the opinion that many of them would not go to camp at all if obliged to prepare their own food.

The arms (Springfield rifles, caliber .45) and equipments are no longer inspected in camp, experience showing that this work can be more thoroughly performed in the armories. Consequently, I did not have an opportunity to do more than observe the general condition of the equipment, which appeared to be very good. The cartridge-boxes are of good pattern, and they, with the belts, are made of substantial material and are very serviceable. Canteens and haversacks have not been issued; the State has a sufficient supply of the former on hand, but none of the latter.

The uniforms are of good quality, and the allowance is quite sufficient. With the exception of the dress-coats, which are double-breasted, and the forage-caps, which have a sloping visor, the uniform is similar in every respect to that issued to the Army, and is well adapted for use in the field. The whole command has been supplied with new overcoats during the past year, which adds very much to the appearance of the men. These overcoats are similar in every respect to the coats issued to the Army, and cost \$10.42 each. The short trousers and leather leggins were discarded this year and long trousers substituted. This change gives great satisfaction to the men, and as the adjutant-general is satisfied that the cost to the State will be less, the change is undoubtedly a good one.

The personnel of the different commands appeared to be very good. I mingled freely with the officers of all grades, and found them to be generally men of character, interested in their work, and anxious to learn their duties. The enlisted men are mostly young and of good physique.

Guard duty received constant attention from the officers of the staff, and in both brigades a great effort was made to instruct and inform the men in this important duty. As a matter of course many awkward and ignorant men were noticed among the senti-

nels, but they all showed an eagerness to do what was proper, and there can be no doubt that, with more instruction in the armory, the men would go into camp fully prepared to perform this duty in a satisfactory manner.

The discipline seemed to be good. The men were in excellent temper and willing, which is in my judgment always an indication of good discipline; but they had not been under restraint a sufficient length of time to show the effect of camp regulations, &c. They were generally respectful and obedient, and only one case of insubordination was noticed by me.

Target practice received considerable attention, and both brigades have a fair proportion of marksmen. The State compels a certain amount of practice when practicable, and makes a fair allowance of ammunition, but this allowance should be increased.

The infantry organizations are all fairly well instructed, some much better than others, but as a whole sufficiently well to enable them to execute quite rapidly most of the movements in the school of the battalion. They do not maneuver with precision and accuracy, which is due in a great measure to the want of judgment of the company officers and the indifference of the field officers. The field officers, so far as I was able to observe, did not seem to understand that anything was required of them when on drill, and as a rule did nothing. In making this criticism I except the field officers of the First Regiment, who were at all times when on drill, &c., conspicuous for their untiring zeal and attention, and as a very natural result this regiment leads them all in accuracy at drill and appearance on reviews, parades, &c.

It was noticed that in almost every regiment when executing movements requiring the guides to mark the extension of the line, &c., they, the guides, were rarely if ever in their proper places; also, that the men were wearied and worn out with the constant side-stepping and pushing to close distances, caused by the company commanders failing to give their commands at the proper time and in a proper tone of voice. Many of the officers who apparently understand what commands to give do not know how to give them, and I think they should be instructed. There are a number of officers in both brigades who are as efficient drill instructors as can be found, and they should be detailed to drill the officers I have alluded to, and to instruct them particularly in giving commands.

Field officers should be dismounted at drill until the guides thoroughly understand their duties and no longer require their assistance.

Skirmish drills by company and battalion were held nearly every day by some one regiment, and excellent progress made.

All the regiments drill fairly well at the manual of arms: in fact, sufficiently well for all practical purposes.

The new cadence and length of step have not been adopted. This should be corrected at once.

There were three light batteries at camp—A and C in the Second Brigade and B in the First Brigade. The battery (B) attached to the First Brigade was in much better order than when inspected by me in 1882, and the harness and material are apparently new. On this occasion it was very well horsed, and maneuvered with considerable accuracy. This battery has attached to it two Gatling guns, caliber .45, and although they had been in charge only a few weeks the officers and men were familiar with their mechanism, and worked them rapidly and with ease. The *personnel* of this battery is very good.

The *personnel* of the batteries (A and C) attached to the Second Brigade is entirely new; that of Battery C was transferred from the infantry (Eighth Regiment) some time last spring, and the former Battery A has been so thoroughly reorganized that only a few men remain in it who were present in the camp of 1885. Under these circumstances very little was expected of these batteries by the adjutant-general of the State; and while it must be conceded that his expectations were realized, it was quite apparent that the officers and men made every effort that could be reasonably expected of them, and the improvement made in discipline and drill during the few days they were in camp was entirely satisfactory. Battery A has two Gatling guns, caliber .45, attached to it, and the men seemed to be fairly well instructed in their use.

It is my opinion that the State of Massachusetts has more light artillery than the strength of the organized militia calls for; and if it were not for the fact that it seems to be settled that no reduction can be made, as indicated by the organization of a new battery last spring, I would recommend that the light artillery be reduced by one battery. Under the existing circumstances I recommend that the three light batteries be detached from the brigades with which they are now serving, formed into a brigade of light artillery, and camp at Framingham entirely by themselves, under command of the senior artillery officer. It is a fact apparent to every one interested in the matter that light artillery instruction under the present arrangement is almost a farce, and does but little good. A large amount of valuable time is wasted attending parades and reviews, and I am convinced that the light batteries will never get much beyond where they now

are in regard to mounted instruction until some such change as the one recommended is adopted.

The First Regiment of Infantry (Colonel Wellington) has been receiving instruction in heavy artillery since 1882, the year the earth-work authorized by Congress was built and armed at South Framingham. I witnessed the drilling of several detachments at the 10-inch sea-coast guns and 10-inch sea-coast mortars, including target practice with the latter, and found the officers and men well instructed. The progress made by this regiment in heavy artillery indicates quite plainly that the money expended on the earth-work at South Framingham was well invested. Instruction in heavy artillery is of the utmost importance, and should be encouraged by the War Department in all States that have harbors to defend. Too much importance cannot be given this subject, and I earnestly recommend that where a beginning has been made, as in Massachusetts, every effort be made to foster and encourage it. The earth-work at South Framingham has been of great service, but does not meet the requirements of a regiment designated for heavy artillery instruction. More instruction in details is absolutely necessary, and it is almost impossible for the various companies, or even detachments, to visit South Framingham for this purpose as often as is necessary. I therefore recommend that Fort Independence, Boston Harbor, a work conveniently located for the companies of the First Regiment at and near Boston, be set apart for their use. If it is possible I would advise the temporary transfer of the fort to the State authorities. Instruction could then be carried on by detachments throughout the year, and in a few months five or six hundred fairly well-drilled artillerymen would be available for the defense of the harbor in an emergency. I also recommend, if the above suggestion can be carried out, that a young officer of artillery be detailed to instruct the officers of the militia in this particular branch, provided the State authorities wish it.

The three companies of cavalry made a very creditable appearance and were well mounted. Since my last inspection they have been provided with carbines and instructed in their use. They drill fairly well, but the cavalry as well as the light artillery would have a better chance if separated from the infantry brigades. They do not have sufficient time for instruction, and a great deal of time is wasted attending parades, reviews, &c. On both of my visits to Framingham the cavalry lost a whole morning, and, in fact, almost an entire day, attending the reception of the governor and the subsequent review. This would be all very well if the men were thoroughly drilled, but under the circumstances it was wasting time—very valuable to the cavalry and very expensive to the State. Considering everything, the cavalry make a far better showing than the authorities have a right to expect, and particularly the company attached to the First Brigade.

FIRST CORPS OF CADETS.

This command encamped at Hingham on ground owned by the corps. This camp has been fully described heretofore, and no change has been made in buildings since last year. This command has a total strength of 15 commissioned officers and 166 enlisted men. All of the former and 70 per cent. of the latter were present in camp. Wall-tents, with flies (the latter being the property of the corps), were provided for all. The camp was laid out as prescribed by regulations, and was thoroughly policed every morning. The messing was done by a caterer under the supervision of the commanding officer, and every meal was inspected by the surgeons before it was issued to the men. To this, and the constant attention and care of the medical officers, I attribute the excellent health of the command. No men were reported sick during the week. Printed orders and camp regulations, complete in every respect, were distributed and faithfully carried out.

The uniform (which is not furnished by the State) is good, but the white dress coats are not adapted for field service. The fatigue uniform is practically the same as that furnished by the State, and is, as I have reported heretofore, well adapted for field service.

The arms (Springfield rifles, caliber .45) appeared to be in good order. The cartridge-boxes and belts (the property of the corps) are of an old pattern, and not adapted for service. They were in good order. Company, company skirmish, and battalion drills were held daily, and good results obtained. The instruction was very thorough, and great pains taken to secure accuracy at drill. Considering, however, the excellence of the *personnel*, and the fact that the four companies occupy the same armory, and that the officers and men are nearly all personally known to each other, the condition of the command in this respect is hardly what it should be.

The officers and non-commissioned officers show the effects of careful training, and were thorough and efficient in all their duties. The discipline was excellent, both officers and men showing a desire to carry it out as intelligent men understand it, and they were entirely successful.

Guard duty was as well performed as is possible where the men have so little of it to do, and with this command the thoroughness with which it was performed is due to the care and attention of the commander of the corps. His methods of instruction cover all points required to secure perfect duty from sentinels, and his personal supervision is so complete that the men must learn unless determined not to do so.

A good range up to 200 yards has been located (on property adjoining the camp and leased by the corps), with suitable butts for markers and a very secure bullet catch. Target practice was carried on each day under the supervision of the company officers and Lieutenant Hays, instructor of rifle practice. The corps has a large number of marksmen.

SECOND CORPS OF CADETS.

The camp of this command was located about 1 mile from Essex, on ground owned by a railroad company, and commonly used by pleasure parties. This command has a total strength of 14 officers and 114 enlisted men; all of the former and 75 per cent. of the latter were present. Wall-tents were used by all, and the camp was properly laid out. The messing was in charge of the quartermaster, who purchased all supplies, hired servants, &c., and exercised a general supervision. Printed orders for the regulation of the camp were issued and faithfully adhered to. The uniform (part of which is furnished by the State) is good, and the undress suitable for field service. The camp was policed every day, but not as thoroughly as most of others visited by me. The tents were not always in good order, and were crowded with trunks and large boxes, presenting a decidedly unmilitary appearance. The discipline was very good; the men were obedient, and appeared to be interested in their work. Guard duty was performed only fairly well, and most of the sentinels, questioned in my presence, were decidedly ignorant of their duties. This, however, was undoubtedly due to the fact that a large number of them were recruits.

The arms (Springfield rifle, caliber .45) appeared to be in good order. The cartridge-boxes and belts were in good order, and are of suitable pattern and fit for service.

Company and battalion drills were held daily, but the results did not seem to me to be very satisfactory. There was a general want of even attempt at accuracy, and a very decided want of interest displayed in the company drills that came under my observation. This, however, I attribute to the excessive heat that made drilling very irksome and unpleasant. The battalion drills were much better, and a decided improvement made each day.

Target practice was carried on daily under the supervision of the company officers.

The officers were efficient and zealous in the discharge of their various duties. Many of the non-commissioned officers were recent appointments, which was a great disadvantage.

Parades and reviews were held in all the different camps—the former daily, the latter at least once.

There has been no change in the organization of the Massachusetts militia since my inspection in 1882, except the addition of a single corps to each brigade and an ambulance corps to the Second Brigade; and while the appropriations remain about the same, the attendance has risen over 10 per cent., which indicates economy and careful supervision. In this connection I wish to state that, while the appropriations for the support of the militia are liberal, I think a fair return is rendered for the money expended. The annual encampment (five days) and one annual drill in the fall of the year costs the State \$12 for each enlisted man attending, and transportation to and from the place of encampment and drill.

The clothing is very good—as good in every respect as the clothing furnished the Army, and costs about the same. The equipment is good and will last a long time. The money expended on buildings and stables at South Framingham was expended with economy and good judgment, and, in my opinion, time will prove the investment to be a good one. The expenditure that gives the least return is the money paid for the light artillery and cavalry, and this will continue to be so until some change is made in the method of instruction.

The positions of adjutant, inspector, and quartermaster-general are combined in one, and the officer who has charge of the various duties pertaining thereto reports direct to the governor, and under the governor practically commands the forces of the State. This arrangement seems to me to be a very good one; and when the position is held by an officer who is a practical business man, and at the same time a soldier of many years' service in the militia, with its interests at heart, as is the case at this time, its advantages cannot be questioned. All supplies received by purchase or otherwise are distributed by this officer, and I attribute the present excellent condition of the equipment to the energy and good judgment of General Dalton, who knows what the militia needs, and to the extent of the means at his disposal has provided it for them. The supply of

camp and garrison equipage on hand is limited to the requirements of the troops when in camp, and very little of this is suitable for service in the field. Regimental and company officers responsible for State property are granted an allowance in money, and are held to a strict accountability. Commissary supplies are not furnished by the State. The men supply themselves out of their pay (\$2 per day) when called into service.

Everything was done during my stay in the different camps to make my visits pleasant, and I am indebted to the different commanding officers and other officers for many courtesies. Adjutant-General Dalton did everything in his power to enable me to observe all that was going on in the different camps and to make my stay personally pleasant.

I am, sir, very respectfully, your obedient servant,

GEO. B. RODNEY,
Captain, Fourth Artillery.

FORT ADAMS, NEWPORT, R. I., September 18, 1886.

The ADJUTANT-GENERAL UNITED STATES ARMY,

Washington, D. C.:

GENERAL: I have the honor to submit the following report of my visit of inspection to the camp of the Rhode Island Militia, in compliance with paragraph 2, Special Orders, No. 183, current series, Adjutant General's Office, accompanied by letter of instructions explanatory thereof:

Following in order such letter as to the subjects on which report is directed, the first, which I will describe briefly as possible, is—

ORGANIZATION.

In time of peace the brigade of Rhode Island Militia consists of not more than twenty companies of infantry, two of cavalry, and one of light artillery, the aggregate at no time exceeding fourteen hundred men. At present the infantry portion is formed in battalions of not less than two nor more than six companies, commanded by lieutenant colonels and majors. The companies in all arms are so closely organized as to *personnel* on like arms of the United States Army that nothing more need be said on this head; but in the way of greater accuracy the brigade morning report of September 10 is appended herewith, as follows:

Troops.	Present.		Absent.		Total present and absent.		Aggregate.
	Officers.	Men.	Officers.	Men.	Officers.	Men.	
Brigade commander and staff.....	9	.....	2	.....	11	.....	11
Signal Corps.....	.....	5	.....	1	.....	5	6
Second Battalion Infantry.....	23	184	2	56	25	240	265
Fifth Battalion Infantry.....	17	159	2	22	19	181	200
First Battalion Infantry.....	20	151	5	64	25	215	240
Fourth Battalion Infantry.....	12	67	.....	22	12	89	101
Battery A, Light Artillery.....	4	62	.....	4	4	66	70
First Battalion Cavalry.....	13	84	.....	13	13	97	110
Total.....	98	712	12	181	110	893	1,032

NOTE.—The above does not include a band of twenty-nine members present.

At the present time the brigade musters very nearly three-fourths of its legal maximum strength. The governor of the State is *ex officio* commander-in-chief and captain-general. His staff consists of an adjutant-general, quartermaster-general, surgeon-general, and judge-advocate-general (all brigadiers), and six aides (colonels). The brigadiers are permitted an assistant each (lieutenant-colonel). The adjutant-general, besides being chief of staff, acts as paymaster and inspector-general, and all commissary duties devolve on the quartermaster-general. For the brigade *per se* there is a brigadier-general, with staff of assistant adjutant-general (lieutenant-colonel), medical director (lieutenant-colonel), assistant inspector-general (major), quartermaster, commissary, judge-advocate, engineer, provost-marshal, signal officer, and two aides (all captains). Battalion commanders have a staff of adjutant, surgeon, quartermaster, commissary, pay-

master, and chaplain (first lieutenants); and for non-commissioned staff, sergeant-major, quartermaster-sergeant, commissary-sergeant, and hospital steward. Enlistment is for three years, with privilege of re-enlistment for one, two, or three years.

The principal officers of the governor's staff and the general of the brigade are chosen by the State general assembly for five years. Brigade and battalion commanders appoint their own staff and non-commissioned staff, the former holding commission co-existent with that of the appointing officer. Battalion field officers are elected by captains and lieutenants for four years, and the latter by enlisted men of the company for three years. Non-commissioned officers are appointed as in the United States Army. Examining boards of two or more competent officers of and above rank of captain are convened by the governor, as he shall direct, to examine in tactics all persons elected or appointed below rank of brigadier whose duties require knowledge thereof.

For service during the prescribed encampment commissioned officers receive the same pay as is allowed commissioned officers of same grade in the United States Army. Enlisted men receive \$1.50 per day, except musicians, who receive \$3. Mounted officers receive, in addition, \$2.50 per diem for use of horses, and the same sum authorized for each horse used for cavalry and light battery purposes.

EQUIPMENT.

The present equipment of the enlisted men of the brigade is furnished by the State, and is nearly identical with that of the corresponding arm in the United States service. I may as well add here that the same may be said of the arms and uniform, also furnished by the State, for all enlisted men of cavalry, artillery, and infantry. Officers furnish their own uniform complete, which, for all grades, is, in cut, color, material, and insignia, a close copy of like grades in the Army. Hence the adaptability of the uniform worn for use in the field has a good, long, and well-tried precedent.

INSTRUCTION.

This is a shadowy subject to touch upon. The brigade and battalion commanders are authorized to call meetings of staff and company officers six times a year for theoretical instruction in tactics and customs of the service, but the component parts of the brigade in most instances are so scattered, and any compensation for attendance so prohibited, that the system is, probably, of but little observance or benefit. A statutory provision makes a five consecutive days' encampment yearly imperative, and herein lies the main, if not all, the instruction provided.

DISCIPLINE.

The tactics and ceremonies for cavalry, artillery, and infantry of the United States Army are prescribed by State law for the militia of the State, and the Army Regulations the code, so far as they are compatible with State law, which prescribes its own methods for courts-martial and resultant fines and penalties. With so much of my instructions complied with, I proceed to the supplementary portions in connection with the eighth annual encampment (Camp U. S. Grant) at Oakland Beach, September 7 to 11, inclusive. I was present in camp during the period of its existence, and fortunately the weather continued suitable for every purpose and for all concerned. The camp complete, as is the custom, having been pitched the day before by details from the command, the bulk of the troops arrived by rail by 10 a. m. on the 7th, with a total present of 99 officers, 684 enlisted men, and band of 30 musicians. The daily routine of duty was directed in a camp order. The duties enumerated, with an exception or two when others were substituted, were strictly adhered to and executed. An order was also issued forbidding men leaving camp without authority or trespassing upon private property. The brigade and camp commander, on whom so much of its success depends, was Brig. Gen. E. H. Rhodes, a quiet, energetic man, of superior attainments in the performance of his duties, which he executed smoothly, without the display of unnecessary ostentation, too often afflicting a State camp. His battalion commanders were also capable, earnest men, imbuing their first lessons, as he did, from the last very sad but very instructive war. The camp-ground was rather inferior for its purpose, being insufficient in extent, of a soft, gritty, sandy soil, emitting dust under treading feet, and cut up with ridges and roadways. The men (intelligent in appearance and young in years, with the physical characteristics generally accompanying immaturity) of all arms were worked hard daily, not only because they needed instruction, but also that the time was short to impart it. General Rhodes, wisely, was not aiming at the perfection of "show drills," but confined the work to the simpler formations and movements of practical application in war. One short brigade drill, it is true, was had, but the experi-

ment showed the component parts were not fitted for it. Men now living will well remember how little comparatively of tactics were called in use during the war. Better keep the troops of limited opportunities down to the essentials and the graces will follow the more easily.

In my observations of the drills and ceremonies during the week errors of omission and commission were noticed (not of frequent character), and it would be a miracle indeed if it were otherwise, when measured by the proficiency of well-trained and disciplined men. Some of the troops had no preliminary instructions, and were in camp for the first time. This fact, in connection with inadequate knowledge of company officers, ill-fitting uniform in many cases, imperfect marching step, and broken line of file closers, tended to some imperfection of execution and appearance, which practice and tailors' shears alone can remedy. Improvement in drill and execution of ceremonies were plainly marked from day to day, so that when the tents were struck the command was probably 30 per cent. better in these matters than on Tuesday morning.

Salutes to officers (that magic path to discipline) became much better observed as the camp wore away, but was still incomplete at the end. It is a simple, easy act, but requires more than five days for proper attainment.

Guard duty, for want of instruction and experience, was not fully understood or executed. The men did as well as could reasonably be expected, and that is all need be said.

As is the case probably in every militia camp, too much familiarity existed between company officers and enlisted men; but this is the direct fault of the elective system, and irremediable so long as it exists.

The marching of the men exhibited considerable precision, but not the uniformity which thorough instruction in the school of the soldier (the alphabet of the art) would afford. Without such instruction the superstructure is built on an imperfect foundation.

In these few criticisms I feel it a privilege as well as duty to make, I do not lose sight of the compensating credit due to officers and men in the fact that they have but limited opportunities to perfect themselves in their military duties; that such duties are purely voluntary; that there is this, that, and another reason standing between them and proper instruction, and that in probably every individual case the officer and man pays more for the whistle than the State returns to him. With the regular soldier it is drill, drill, month after month, year after year, under capable guidance, and all are well paid for it, too.

The infantry portion of the brigade is lamentably deficient in the most important duty of target practice. That is conceded on all sides. Last year three hundred and sixty men had a practice on the State range of ten shots each (quite too few), when an accident (killing a cow, I believe) occurred, and practice was suspended. Thus far this year there has been no practice at all, from insecurity of the range or want of appropriation. Pity 'tis, for with such ignorance of the use and capabilities of his weapon as must be the case under such circumstances, the soldier is illy prepared for a call to active duty in the field.

The personal behavior of the men during the encampment, so far as my observation extended, was excellent. The camp itself was well planned and laid out, and kept in most thorough police at all times and in every respect.

The men, as also the officers, were subsisted by contract with caterers, which relieved them from the drudgery of cookery and misery of imperfect digestion of the distinctive soldier ration, to which they are not accustomed. Water was supplied from a large tank, of good quality and sufficient in quantity.

The light battery has four 6-pounder James rifled bronze guns, venerable harness, and uses horses and drivers hired for the occasion only. With such manifest disadvantages it did remarkably well, thanks to an experienced and hard-working captain. The same may be said, in general terms, of the cavalry—two companies, armed with saber and carbine. These two organizations cost but little to maintain, and are kept up probably as a matter of State pride and a nucleus for possible future expansion.

* There was little or no sickness in camp during its existence—much, probably, due to good, healthy food, well cooked, and good appetites, engendered by steady work.

A very noticeable feature of the encampment was the presence, by order of the acting Secretary of War, of Battery E, Fourth Artillery, Captain Roder and Lieutenants Ennis and Totten. The battery participated in all the ceremonies, except guard, with position on right of the line. It was furnished tents by the State, but did its own cooking, and its behavior throughout was excellent. It gave an exhibition drill one day in company movements and exercises as skirmishers, to which the brigade was drawn up, in rectangular shape, as witness. The eye being a good educator, I have no doubt the affair was instructive and beneficial.

The entire brigade occupied one afternoon in a reconnaissance in force in adjacent country, with supplementary object of a lively contest with a mythical enemy. The

picture, though a mimic one, was realistic in some features, and a good practical lesson to officers and men.

Wall and hospital tents, complete, are in excellent condition, owned by the State and sufficient for the brigade.

A section of improved Gatling guns, complete (those hybrid monsters whose definite assignment to some arm is still an undetermined question in our service), has been issued to the brigade, attached to the foot troops, and was present in camp. A signal corps of five well-trained men was also present, and gave exhibitions by flag and torch-light. What system would be followed by the various supply departments for "placing the force in condition for active service" is something hypothetical and impossible of definite reply. I assume service within State lines is referred to, for which the method would depend on the particular duty to be performed. By a system adopted by General Rhodes of having the superiors keep the day and night address of the next grade or rank below, the brigade can be assembled in goodly numbers and very rapidly at any time. It is difficult to state recommendations to increase the usefulness of the troops weighted with any great degree of probability of adoption. Some years of experience now have compelled the military authority of the State to the present groove of action as most commensurate with their appropriations and most consonant with certain drawbacks and restrictions hampering militia soldiery. Much that could be written on this subject would be simply waste of time and ink.

Recommendation having some possibility of adoption, and which, if adopted, would most surely be of great benefit to the brigade, is as follows:

1. A larger and better camping ground than that at Oakland Beach, to be owned by the State.
2. Yearly encampment increased to ten days, and commutation for rations increased 20 cents per diem.
3. Greater attention to target practice.
4. Better theoretical instruction of company officers. As Army officers cannot be spared for this purpose, the State might employ a competent man to devote his whole time to it under sufficient compensation.
5. Correction of the evil of absenteeism from camp instruction. Twenty per cent. of the aggregate strength of Camp U. S. Grant were absent from it.
6. A suitable State armory is needed for storage and instruction purposes.
7. Direct aid from the General Government in such manner as Congressional wisdom may authorize.

In concluding, I desire to record my appreciation of the courtesy and cordiality tendered me by every one during my tour of special duty in their midst. Governor Wetmore, who manifestly takes a warm interest in the welfare and efficiency of the troops, remained in camp from first to last. His continued presence, I have no doubt, stimulated officers and enlisted men, and gratified them also with assurance that their labors were under the eye, as well as personal interest, of the highest military power of the State.

C. L. BEST,
Colonel Fourth Artillery.

FORT MCHENRY, MD., August 10, 1886.

The ADJUTANT-GENERAL UNITED STATES ARMY,
Washington, D. C.:

SIR: In obedience to instructions contained in extract of Special Orders, No. 150, dated Adjutant-General's Office, Washington, D. C., June 25, 1886, directing me to visit the camp of the Indiana National Guard, at Lafayette, Ind., from July 26, 1886, to August 2, 1886, I have the honor to make the following report:

On July 26, 1886, I reported to Brig. Gen. George W. Koontz, adjutant-general of the Indiana State Legion and brigadier-general commanding Camp Gray, and remained at Camp Gray and Lafayette, Ind., during the encampment, *i. e.*, until August 2, 1886.

On my arrival I found the camp at the fair-ground, some 2 miles from the city. The camp itself was fairly laid out and very suitable for the purpose. The headquarters were not properly situated, and much trouble and confusion occurred on that account, nor was the brigade represented by the proper number of staff officers or orderlies, at first rendering it difficult for the general commanding to put things in a proper trim and efficient working order. In fact, he had to do duty which should have been left to subordinates.

Desiring to stay in camp, I applied for a tent, but none could be furnished. Neither could I obtain a horse until late, and then a borrowed one. Wishing to aid by all means in my power, I offered my services in any capacity, and was requested to act as umpire

at competitive drill, which I did. In the mean time I followed the instructions contained in letter from the War Department, Adjutant-General's Office, of June 30, 1886. Mingling freely with officers of all grades and picking up points here and there, I was enabled to come to a fair understanding.

It was not until July 30 that I was able to obtain a consolidated report of the legion, which is herewith presented, together with the independent Indiana and other organizations:

Designation.	Commissioned and non-commissioned field and staff.	Captains.	First lieutenants.	Second lieutenants.	Privates for duty.	Guard and police.	Detached service.	Sick.	Total.
First Infantry.....	5	9	9	6	301	33	.....	4	367
Second Infantry.....	5	8	8	6	290	35	1	.....	357
Third Infantry.....	5	9	9	6	301	33	.....	4	367
First Artillery.....	5	6	4	3	140	13	.....	.....	171
Total Indiana Legion									1,262

And the—	
Logansport Grays	33
Indiana Light Infantry	53
Emmett Guards	31
Rice Guards.....	33
Total independent Indiana organizations	150
Visiting companies outside the State—	
Taylorsville Guards	31
Company F, First Kentucky Legion, Louisville, Ky.....	35
Total	65

RECAPITULATION.

Indiana Legion	1,262
Independent Indiana companies	150
Visiting companies.....	65
Total in camp	1,477

During my various visits and inspections I witnessed the efforts made by the infantry and artillery commanders to improve the military status of their commands, and I must say that their work was continuous during the short time, from the settling down to the breaking up, and a decided improvement was visible, but the grand parade in connection with Barnum's circus was a great drawback, not only derogatory to the dignity and morale of the troops, but occasioned the loss of much valuable time which could have been utilized in the various camp duties.

During the parade and review in honor of Governor Gray, I noticed that many of the officers did not know even how to salute, but the marching was good, and the men made a good appearance. On Sunday I made a thorough inspection, examining each piece and man thoroughly, and this inspection, in connection with observations made at other times, enables me to state that I found as follows:

CLOTHING.

In all cases serviceable and generally the United States uniform. The fit was of such a nature as to make a decidedly good-looking soldier.

ARMS.

Of the United States breech-loading rifle musket, caliber .45, and in all cases serviceable. Their condition showed me that considerable care was manifested in keeping them in order. After the sham battle I found but few pieces that had not been prop-

erly cleaned. Cartridge-boxes and belts were worn, but in good condition. No knapsacks were used. Camp and garrison equipage was only picked up for temporary use, and not available in case of emergency. The tents were hired for the occasion. The department of supplies consisted of the quartermaster-general. He ordered from the city stores as wanted. Rations not issued from any supply-table.

The staff department had no system. The quartermaster-general and the adjutant-general seemed to do all the staff work. Transportation was ordered from the city as required. The officers and men were anxious to learn their duties, and, so far as I saw, were obedient and willing. The men failed in nearly every case to salute the officers; in fact, I only saw the salute given in one instance. Guard duty was performed in a very slovenly manner, so far as detail and appearance went, but the men were vigilant and tried hard to do their duty. I might mention here that I noticed the necessity of the officer of the day being recognized by the old way of wearing the sash.

In company formations the men were quite steady, but brought together in the regiments they seemed lost and bewildered, and there was a great want of stability noticeable. This was through no fault of the men, as it was the first time the companies had been consolidated to form regiments. The company and regimental drills, the only ones attempted, were frequent, and properly conducted. I must mention the Second Regiment, Col. N. R. Ruckle, as an instance of what the energy and attention of the regimental commander will do. The artillery (consisting of 3-inch rifles) deserve credit. They had a soldierly appearance; and took pride in their guns and duties. As they had no horses, they had only the standing-gun drill and mechanical maneuvers.

Details of camp life were not carried out in any great degree, yet it was attempted. In my camp inspection I found that considerable care had been taken to police the tent grounds and place things in ship-shape order. I am satisfied that one full week of thoroughly and well conducted camp life, with everything prepared and in working order on the day the troops arrive, and attention being given to camp only, and not parade and reviews in the city, that the Indiana Legion would show an improvement which would surprise even themselves. I found the great drawback to be want of funds for the encampment, none having been appropriated by the State. In fact, it had to be obtained as a gift or by the sale of tickets to the fair-grounds and Barnum's circus. It certainly did not look well to see officers in full uniform acting as ticket agents at times. Before an encampment of this kind can be successfully carried on, money must be appropriated by the State and the show business left entirely out.

In conclusion, I would state that the 1,262 men of the Indiana Legion (and all were mustered in service) can be depended on in an emergency. They have a good basis of drill and discipline in company organizations. Beyond the rifles and cartridge-boxes and belts, the Government would have to furnish everything.

I am, sir, very respectfully, your obedient servant,

R. LODOR,
Major Third Artillery.

FORT ABRAHAM LINCOLN, DAK., *September 20, 1886.*

THE ADJUTANT-GENERAL UNITED STATES ARMY,

Washington, D. C.:

SIR: I have the honor to report that, in obedience to paragraph 8, Special Orders No. 195, Headquarters of the Army, Adjutant-General's Office, current series, and letter of instructions from the Adjutant-General United States Army, dated August 25, 1886, I proceeded on the 1st day of September instant to Aberdeen, Dak., at which place the second encampment of the Dakota National Guard was to be held. I was accompanied upon this occasion by Capt. John Pitman, Ordnance Department, and First Lieut. R. W. Hoyt, Eleventh United States Infantry, to both of whom I am under many obligations for valuable assistance rendered me during the encampment. The camp-ground was located within the grounds of the agricultural association, and which are commonly used for the county fair. They are about one mile from the depot of the Chicago, Milwaukee and Saint Paul Railway, the track of which road passes within a short distance of the grounds. The grounds were entirely suitable for the occasion, being quite level and covered with a heavy sod. The camp was supplied with water by water-wagons and stored in barrels. It was lighted by two Brush electric lights, put up for this occasion.

The encampment commenced September 2, and continued until the evening of the 4th. The first troops arrived during the evening of September 1, and departed about 9 p. m., September 4; the remainder early the next morning. The name given was Camp Hancock, in honor of the late Maj. Gen. W. S. Hancock, United States Army, and was commanded by Brig. Gen. John B. Dennis, Dakota National Guard, who commanded during the encampment at Fargo a year ago. There were present for duty one

assistant adjutant-general, one inspector-general, one quartermaster, one assistant quartermaster, and two aids-de-camp, forming the staff of brigadier-general commanding. There were present also several of the staff officers of the governor of the Territory. The general duties of the quartermaster's and subsistence departments were performed by Brig. Gen. Charles H. Peck, quartermaster-general of the Territory.

Two regiments were present of the Dakota National Guard—the First Regiment, consisting of nine companies of infantry and one battery of artillery attached thereto, commanded by Col. William A. Bentley, and the Second Regiment, consisting of nine companies of infantry, commanded by Col. M. W. Sheafe. Of these one company from each regiment was absent during this encampment. The regimental commanders were the same as last year.

The total number present for duty in camp, officers and enlisted men, was 520. Last year there were 922, showing a falling off of 402. This in a great measure was due to the encampment taking place in the midst of the harvest season, making it impracticable for many to absent themselves from their business. There were also present three bands of music—one for each regiment and one on duty at brigade headquarters. The troops were placed in camp in column of companies, with the regulation interval between regiments. The tents were erected by details sent to the camp-ground before the arrival of the troops, so that no delay was occasioned, and the companies began their military exercises within a very short time after they reached camp. Each company messed by itself. The cook-tents were placed upon the flanks of companies, and the cooking was done over fires built in trenches. Camp-kettles and mess-pans were generally used, and each man was supplied with the necessary plate, tin cup, knife, fork, spoon, &c. The food consisted of the usual Army ration, together with a variety of fresh vegetables. Generally it was fairly well cooked, but in several instances that fell under my observation an improvement would have been desirable. The time in camp was too short to enable the cooks to become familiar with the ways and means of preparing and serving food for soldiers. In themselves the rations were of excellent quality, and were obtained from the local markets by contract. The price of the ration per man per day is estimated to be less than 30 cents, all articles being delivered upon the ground without cost of transportation. Regimental quartermasters, who also acted as commissaries of subsistence, made the issues to the companies of their regiments. The police of the camp was generally very good. The tentage was practically the same as used a year ago, with some additions. They are large wall-tents, in size 10 by 12, 12 by 12, and 16 by 20 feet; are made of 10-ounce duck, too light for general field service, but sufficient for yearly encampments of a few days. The Territory owns sufficient camp equipage for 1,000 men, which is in charge of a storekeeper, and is stored, when not in use, at some central point in the Territory, and can be sent to any place within the limits of the Territory on twenty-four hours' notice. It is accounted for by the quartermaster-general of the Territory, and is not issued to regiments. At the close of the encampment he takes charge of it again.

For bedding for the troops there was a plentiful supply of clean oat straw, upon which the men's blankets were spread.

The troops were moved to and from the camp under contract with the different railroad companies at a rate of 1 cent per man per mile. The transportation was furnished upon requests similar to those used by the Quartermaster's Department of the United States Army, which were afterwards turned in to the quartermaster-general of the Territory for payment.

There was no field hospital established in camp. Cases of illness, which were rare, were treated in the companies by the medical officers of the regiments. I heard of no serious cases of illness.

Guard duty was regularly performed during the encampment, the camp being surrounded by a chain of sentinels. I did not find the duty of sentinels as well performed as I think it should have been. In this connection I would recommend to captains of companies that they make during the winter months at their armories the instruction of their men in the duties of sentinels a prominent feature. I am led to believe that little or no attention is paid to it at such times, the captains depending entirely upon the instruction given during the encampment, which of course must be comparatively little.

As stated, the encampment continued three days, during which time company and battalion drills were held every day, principally the latter, of which there were two each day, morning and afternoon. I was gratified to perceive in this respect a marked improvement over last year. The movements, though perhaps not quite so smoothly executed as greater practice would produce, were very well done, and gave evidence that but a few weeks in camp would produce in them well-instructed troops.

Dress parades were held each evening, which were well executed.

On the third and last day, at which the governor of the Territory was present, there was a review of the entire brigade, and afterward a march to the city, where the troops listened to an address from his excellency the governor of the Territory.

There was no target practice during the encampment, neither could I learn that any had been had by any of the companies, with the possible exception of one. Company A, First Regiment, has had a few practices during the past year, and have qualified a few marksmen. If any other company had any I did not hear of it.

On September 3, at 10 o'clock a. m., I made a close inspection of the Second Regiment, Col. M. W. Sheafe commanding. At this inspection there were present eight companies, one company (H) not being at this encampment. There were 27 commissioned officers and 204 enlisted men on parade. The morning report of that day shows in camp 27 commissioned officers and 233 enlisted men. There were, therefore, 29 absentees from this parade. Temporary illness was the main cause of this absence of many, the remainder being on guard or other duty preventing their attendance. These companies show a marked improvement in their instruction as compared with last year, showing that their officers have endeavored to give their commands thorough instruction so far as their facilities would permit. The arms are the same as at last inspection, the Springfield rifle-musket, model 1866, caliber .50. They were in a fair condition, with the exception of a slight looseness at the hinge-pin and the lock-screws. This last may be due to the shrinkage of the stock. The equipments are the old cartridge-box with the tin receptacles removed, having the oval brass United States plate on the flap, black leather waist-belt, and leather bayonet-scarbald with brass tip. The equipments were not in very good condition. As at last year, the companies have various uniforms, though the general effect is nearly that of the uniform of the regular service. I found the officers of this regiment zealous in the discharge of their duties and the men reasonably well disciplined.

In the afternoon of the same day I inspected the First Regiment, Col. William A. Bentley commanding. This regiment also presented but eight companies, one company (C) being absent from the encampment. There were present at inspection 22 commissioned officers and 165 enlisted men. The morning report of that day shows in camp 27 commissioned officers and 252 enlisted men. There were therefore 5 commissioned officers and 87 enlisted men absent from this inspection. Many of these were absent no doubt from the same causes obtaining in the Second Regiment, already alluded to, but a great many others were absent who should have been present. As at inspection last year, I found a great variety of uniforms in this regiment, each in itself very good and serviceable, but entirely unsuitable when the companies are assembled as a regiment. The arms and accouterments the same as last year and as the Second Regiment; their condition substantially the same as those of the Second Regiment. The instruction of this regiment I found very good indeed—the officers zealous and desirous to learn.

At the close of the inspection of each regiment, at the request of the regimental commanders, I exercised the troops in a number of battalion movements. I was exceedingly well pleased at the proficiency shown. Although at this encampment the time was shorter and the number present far less than last year, it was characterized by an increased determination to improve if hard work would accomplish it. The men were drilled six hours or more each day in addition to the exercises required by the various ceremonials. Of course such determined effort could have but one result—a marked improvement in drill and discipline—and I am glad here to express my admiration for and commendation of the spirit developed.

I have the honor to renew my recommendations of last year, that the troops of the Dakota National Guard be required to obtain the United States regulation uniform at the earliest practicable moment. To effect this I would recommend that the \$5 per year per man which I am informed is allowed by the Territory as a uniform fund be not paid until upon report by the inspector-general of the Territory it is found that the companies have procured or are procuring such uniform.

I also renew my recommendation that new arms and accouterments of the improved patterns be issued to these troops as soon as practicable. It will greatly encourage them, and will add much to their efficiency.

In conclusion, I beg to express my acknowledgments for the many courtesies extended to me and to the officers associated with me by the brigadier-general commanding and the members of his staff, who did everything possible to make our stay with them agreeable, in all of which they succeeded most admirably.

I am, sir, very respectfully, your obedient servant,

E. F. TOWNSEND,
Lieutenant Colonel Eleventh Infantry.

Report of an inspection of the Third Regiment Alabama State Troops, in camp near Selma, Ala.

Pursuant to paragraph 2, Special Orders, No. 140, Headquarters of the Army, current series, I started for Selma, Ala., on the 16th of July and arrived there on the 17th. On the 18th the troops composing the Third Regiment Alabama State Troops, with the exception of two companies that had not arrived, marched out, under command of their colonel, S. W. John, and established their camps two miles from the city. The site is on the whole well adapted to the purpose. The tents were pitched in a grove of oaks that afforded excellent protection from the heat of the sun, and the soil being of a sandy, absorbent nature, no ill effect resulted from standing water and dampness, notwithstanding the level surface and frequent rains. A good drill and parade ground, free from trees and other obstructions, adjoined the grounds on which the tents were pitched. Water in abundance and of excellent quality was supplied by an artesian well. The wall-tent is used exclusively by the command, of which they have a good supply in good condition. The tents were well pitched and were all well floored, the latter being very properly raised, to some extent, to secure ventilation. After its establishment the camp was thoroughly policed, and continued throughout the encampment to be kept in a fairly neat and cleanly condition. The garbage, however, was not carted sufficiently far away.

The strength of the command, in the aggregate, was as follows: A full complement of field and staff officers and non-commissioned officers, as exists in the infantry of the United States Army, and in addition a surgeon, assistant surgeon, chaplain, commissary, ordnance sergeant, commissary sergeant, and hospital steward; eight infantry companies, composed of 18 officers and 262 non-commissioned officers and privates; one battery, composed of 4 officers and 35 men; and one band of 15 musicians; aggregate strength of regiment, 297. Of this number there were present in camp 217. One company, however, was about two days late in arriving, and one, or rather a detachment of one, appeared only the day before breaking camp.

The command is armed with the Springfield rifle, and in general the guns are in pretty fair condition for service, though nearly all are suffering from rust and a large proportion are deteriorating rapidly from this cause. A general indifference on this point is obvious. Nearly all the companies (one exception) are equipped with the cartridge-boxes, belts, &c., furnished by the Ordnance Department United States Army, which are in good condition for service.

The battery has two 3-inch rifled guns and one Gatling gun, with carriages and limbers (no caissons). The Gatling gun is .45 caliber. All three are in good condition and well cared for. There are no front sights, however, for the 3-inch guns. The battery has also nine single sets of harness in fair condition. The difficulties of keeping up an efficient battery at this point are such that although a showing may be made where persistent, intelligent, and most creditable effort is evident, yet the organization must be of necessity practically inefficient. Rather than waste their energies on an impossible task, if they would give the same amount of attention to perfecting themselves in the infantry drill they could probably take their stand by the side of the best drilled company in the command.

The companies are located at different points of the State, as follows: The battery at Selma. The infantry companies, two at Selma; one at Talladega, 110 miles distant; one at Gadsden, 140 miles distant; one at Demopolis, 50 miles distant; one at Uniontown; one at Greensborough; and one at Scottsborough, 300 miles distant. The last named is the most distant, and would require, after notification, at least twenty-four hours to arrive at the headquarters at Selma. Without it the companies could assemble in eighteen hours; excepting the one also at Gadsden, the assembly could take place probably in four or five hours.

Each company has its own uniform, there being little similarity between any two companies in this respect. They all have fatigue uniforms, which would generally be fairly serviceable in the field. None have overcoats. Each company has in its possession 1,000 rounds ball-cartridges, which are kept constantly on hand for actual service. The companies, with a few exceptions, are quite well drilled in the school of the soldier and company. But little attention, however, has been paid to skirmish drill and target practice. During the encampment, however, target firing was carried on daily in a systematic and most creditable manner. The method practiced in the United States Army was adhered to. Battalion drills, parades, and reviews were also carried on during the encampment, and undoubtedly with much benefit to the command.

The discipline of the camp was well preserved. The colonel is evidently a man of force and good judgment, and makes his own business-like and energetic methods felt throughout his command. The adjutant's duties were new to the incumbent of that office, though his zeal and anxiety to attain proficiency, as well as natural aptitude,

were very apparent. The quartermaster impressed me as being energetic, business-like, and practical in his methods, and an able assistant. The medical department seems to be well organized and conducted. The surgeon was in daily attendance with apparently all necessary appliances, medicines, and conveniences. The command generally seemed to respond with alacrity and cheerfulness to the efforts of the colonel to impart instruction and enforce discipline. Guard duty seemed to be the most trying ordeal, but one which in general was well borne, and the commendable efforts of the colonel to carry out this important duty according to the spirit and letter of the regulations was well met and seconded.

In general I think this regiment could be relied upon to do prompt and creditable service in case they are called out by the State or General Government. Of course they labor under the usual disadvantages of State troops—lack of means, opportunity, and encouragement. But the real efficiency they have attained and the high public spirit displayed are all the more to be commended.

I think it would be very advantageous if all the companies would adopt a common uniform, not only in this regiment, but throughout the State where there is an organized company. The fatigue uniform, at least, should be common to all, as in this they would appear for service.

Respectfully submitted.

R. G. HOWELL,
Captain, Second Artillery.

MOUNT VERNON BARRACKS, ALABAMA, July 30, 1886.

FORT RILEY, KANS., September 26, 1886.

The ADJUTANT-GENERAL UNITED STATES ARMY,
Washington, D. C.:

SIR: In compliance with Special Orders, No. 123, of 1886, from Headquarters of the Army, I have the honor to state that I have inspected the Kansas National Guard, and respectfully submit the following report:

The military establishment of the State of Kansas is at present organized as follows: The State constitutes one division, commanded by the major-general, subdivided into four brigade districts, each under the command of a brigadier-general. Each brigade district contains one regiment of eight companies. Attached to this force is one battery of light artillery, divided into two sections of two guns each, one being stationed at Winfield, the other at Topeka, Kans. The governor of the State commands in chief, and has a staff consisting as follows: One adjutant-general, one quartermaster-general, one paymaster-general; and one surgeon-general, each with the rank of colonel; three aides, with the rank of lieutenant-colonel; and one assistant adjutant-general, with the rank of major. The major-general and brigadier-generals are provided by law with appropriate staffs. To this is added a military board, consisting of the major-general, the four brigadier-generals, and the adjutant-general, constituting an advisory board to the commander-in-chief on all matters pertaining to the military interests of the State.

The commissioned officers provide themselves with uniforms and equipments. The non-commissioned officers, musicians, and privates are furnished by the State with a uniform, consisting of blouse, trousers, and cap of like quality and pattern as worn by the Army of the United States. The troops are armed with the Springfield rifle, and these, with equipment, Anson Mills cartridge-belt, canteen, and haversack, are furnished by the United States upon requisition by the State authorities.

To support this organization a direct tax is levied, and the revenue thus raised is exclusively devoted to military purposes. Authority having been granted by the Secretary of War to the State authorities to hold their second annual encampment on the Fort Riley Military Reservation, ground in every respect suitable for a camp was selected, and arrangements were made for concentrating the division at Junction City, Kans., by 3 p. m. on Monday, September 20, 1886, and marching the same to the camp, which, in compliment to the Lieutenant-General of the Army, was named "Camp Phil Sheridan." This arrangement for arrival, &c., was interfered with by reason of the several railroads leading to the point of concentration failing to furnish the necessary transportation at the time expected.

One of the regiments arrived at Junction City about 1 p. m., September 20, and marched directly to the camp. This command was met by the band and cavalry troops of Fort Riley and received with appropriate honors. At 4 p. m. four companies of another regiment were met by the same United States troops at the reservation limit, duly welcomed, and escorted to the camp with appropriate compliments. The other portion of the Kansas National Guard did not arrive at the encampment until about midnight of the 20th.

The camp was laid out in two lines, each having a front of two regiments, the color lines of the rear regiments being very close to and directly behind the rear line of tents of the two regiments in front. The tents of the brigadier-generals were in rear of the several brigades, which, under this organization, contain one regiment each. The tents of the division headquarters were in rear of the center of the main camp. This arrangement was objectionable to a great degree. The several regiments (brigades) were huddled together in a small space of ground and allowed no special distinction to be made by the men of their own camps of necessity. The men of one regiment were mingling with another, and there was continually a roaming through each camp and street regardless of the rights and comforts of those having special claims within their own regimental lines. It would have been much better to have camped the four regiments in line, in column of divisions, or even companies, each regimental camp conforming to tactical instructions. This would have given the colonels complete control of their own companies and grounds, and the men would have felt that there was one special spot to and from which they could have ingress and egress without overrunning the special domain of another regiment. In my judgment, much instruction in reference to camping was lost to the whole command by this faulty arrangement of the encampment. The command, not arriving on time, did not get fairly settled down until the afternoon of the 21st of September, thus consuming nearly two days of the short time allotted for military exercises.

At 3 p. m., September 21, the governor of the State of Kansas arrived, and announced his intention of visiting Fort Riley. He, accompanied by Maj. Gen. Thomas M. Carroll, commanding the Division Kansas National Guard; Col. A. B. Campbell, adjutant-general, and Maj. N. O. Ford, aid-de-camp, came within the limits of the post, and was duly received with all the prescribed honors directed by the regulations of the Army to be given to governors within their respective States. In addition to these prescribed honors a dress parade of the troops composing the Fort Riley garrison was held, agreeably to the wishes of the governor and other officers of the Kansas National Guard present.

On Wednesday, the 22d, matters had settled in the camp to definite shape, and military exercises were carried on by the several commands in guard mounting and company drills in the morning and battalion drills in the afternoon, closing the day with dress parades in each regiment. Considering the limited opportunities, all of these exercises were fairly performed, and the military work of the several organizations, as a whole, was very creditable.

On Thursday, the 23d, the entire command was inspected, as prescribed by tactics.

On Friday, the 24th, the First, Second, and Third Regiments broke camp on the military reservation, packed tents and baggage, and transported the same to the railroad preparatory to leaving for home. These three regiments were early in the morning marched to the Davis County fair-grounds, a distance of about 5 miles from the camp, that an assembled multitude might be shown a grand review, a band contest, and that illusory spectacle, a "sham battle." In my judgment, this day would have been more profitably employed by continuing the military duties so well begun at the encampment. The officers and men had in a measure accustomed themselves to their new surroundings, and exercises of a practical character could have been performed and have inured to the benefit of the entire command. By this time the novelty incident to the collection of so large a body of troops in a camp had somewhat worn off, and the influx of visitors, sight-seers, and loafers had in a degree ceased, leaving the officers and men free to instruct themselves in the duties for which they were drawn together. The march from the camp to the fair-ground tired the men and unfitted them for satisfactory work of the day, and caused other derangements which were not conducive to good results. I was informed that four of the companies had nothing to eat from the night previous.

I recommend in future encampments that reviews, drills, and unnecessary ceremonies away from the camp be discontinued. I believe the officers of experience connected with the Kansas National Guard were in general opposed to the outside display.

I recommend more strongly that sham-battle performances of this organization be considered things of the past. Such maneuvers are but delusive representations of the intended show. They are of necessity carried on on a small scale and of very short duration, and the benefits are of no practical value. Such should only be participated in by large masses of troops thoroughly instructed and trained in all practical garrison and theoretical field duties, and carried out according to well-matured plans, which require the most experienced, thoughtful consideration, care, and preparation. There are usually in ceremonies of this character as performed by our militia a few accidents incident to the helter-skelter scramble, a dense volume of smoke, much surplusage of noise, and an indiscriminate waste of blank ammunition; and neither officer, soldier, nor spectator are any better off in a soldierly respect.

The time (six days) allowed by law for this encampment was too short; only two days were available for solid soldierly work. I recommend that efforts may be made to amend the law so as to allow the troops to have at least ten days in camp, the days of arrival and departure not to be counted in this allotment. This is as little time as the State can expect the troops of its National Guard to gain a benefit commensurate with the cost of bringing them together. It would have been vastly to the interest of the whole organization could the encampment have lasted fully for ten days in 1886.

I am much in favor of regimental camps. There can be no question but a camp of a regiment rightly conducted offers better opportunities for instruction of the individual soldier than either brigade or division encampments. It takes so much longer time for the novelty of the large camp to wear off. In them much valuable time is lost in picnicking with friends and visitors, who always overrun them and interfere more or less with the duties of the men. The regimental camp could with much smaller expense to the State be established a day or two prior to the coming of the first regiment. At the appointed time this command could march in, take the camp, and in a few hours be ready for all the military duty requisite to prove its efficiency in time of need. Its colonel could have complete control, and the commanding officers of regiments and companies be held responsible for the instruction and discipline of their commands. I recommend the regimental-camp system for the next two years at least. Other and older States have profited in this respect by the crucial test of trial, and the State of Kansas can lose nothing, and may gain much, by a like experiment.

The guard mounting in this camp, by all the regiments sending details and forming what was called a division guard, was a cumbersome and unwieldy affair. This complicated ceremony with well taught and disciplined troops is rarely performed without a hitch or two. In my judgment regimental guard mounting would have been more satisfactory and instructive. The most efficient camp guard for a camp of militia would have been that taken from one regiment, and not from details from each. A spirit of friendly rivalry would have been engendered between the officers and men of each, all striving on the day assigned them to excel their comrades whom they relieved in military observance of their duties. The guard mounting held in this encampment was only fairly performed, and the duty by sentinels on post and at the guard-tent showed that guard duty has received but little, if any, attention. But few of the sentinels walked their beats in a soldierly manner, or carried their pieces at all times as they should. There were a few notable exceptions to this careless and inattentive manner of performing a very important duty, and I regret that I was not able to single them out by name, that they might be presented to their commanding officer for commendation. There was no regular entrance to the camp, consequently the beats of all the sentinels were crossed and recrossed by outsiders at will, singly, in couples and crowds, at all times of the day and places, confusing the sentinels and rendering their duty, as far as proper construction was concerned, almost a nullity. The officer of the day and the officer of the guard, duly mounted on the morning of the 23d of September, left the camp and were absent several hours (two miles away) during the afternoon of their tour of duty. The stay of the troops was of such short duration that but little could be done in the matter of correcting individual mistakes.

The men have only one suit of clothing, and this has been in possession, more or less, for more than a year, and is in some instances becoming shabby; notwithstanding, some of the careful men presented a neat and clean appearance after spending days in the dusty camp. The careless should be more critically looked after in respect to personal appearance. Generally the fit of the clothing was good, but the personal appearance of many of the men would have been much improved had their faces received the attention of a barber prior to the inspection. Many of the men marred the general good and soldierly appearance of their companies by wearing collars (in some cases unclean), others fancy-colored handkerchiefs, &c., and neglecting to have their shoes properly dressed.

The State does not furnish the men with blankets or bedding, consequently the tents did not present a very tidy appearance. Each soldier providing his own, gave the camp as many hues and kinds; and as loose hay only was used for bedding, every gust of wind carried the same over the camp. It was impossible to keep the regimental and company grounds in a proper state of police. Other duties crowded so one upon the other in the few days that this very important part of the soldier's duty in camp was entirely neglected.

The command had no target practice at the encampment. The commanding officer of Fort Riley offered the use of movable targets for service in the camp and the freedom of the rifle range of the post, but no time could be spared to be devoted to this exercise.

The food supply was purchased on the basis of the U. S. Army ration, supplemented by a generous supply of potatoes and onions; was issued uncooked to regiments, each company receiving its due proportion, and cooking for themselves. I heard but few complaints in reply to questions asked in reference to company messes.

There is little difference in the quality of the men of the several regiments, unless it be that those of the Fourth exhibit superior physique. Some companies in each were greatly in advance of others in instruction pertaining to the manual of arms and company and battalion drill; but I must say on many points a general confusion of ideas prevails. Most of the shortcomings of the camp, however, are the direct result of too much attention to the show part of the drill and too little to practical work.

I would recommend that the colonels of regiments be authorized by the State to officially visit each of his companies at least once per year. At present he only sees them at the annual encampment.

The medical department was in charge of the surgeon-general.

There were present with the First Regiment one surgeon, one assistant surgeon; with the Second, one surgeon and one assistant surgeon; with the Third, one surgeon and one assistant surgeon; no medical officer with the Fourth. All the regiments except the Fourth had hospital stewards.

There were complaints that the supplies of medicines and medical stores were so short that such things as opium, quinine, and surgical dressings would run out before the breaking up of the camp. Only one wall-tent for dispensary for entire command. A hospital-tent was on hand to put up if necessary. There were no hospital mattresses nor hospital bedding of any kind; no hospital mess-chest; no iron bunks, nor bunks of any kind. There should be a hospital-tent with each regiment, and with each one-half dozen bunks, mattresses, blankets, and hair-pillows. There were no panniers; should be one for each regiment. There was only one field-case and two pocket-cases (each personal property) in the entire camp; should be a field-case and a pocket-case with each regiment. There were but few bandages, and only one pound of cosmoline, for cerates and ointments, in the camp. Some of the medicines are those left from last year's encampment; the rest were purchased by the surgeon-general at the State's expense, there being no medical purveyor. There was reported vastly more sickness in this camp than there was during last year's encampment; many cases of diarrhea and piles; six cases of cholera morbus on the fourth day. There was no provision of any kind for the treatment of the sick or wounded; no stretchers for moving a wounded man. The medical officers report the camp very poorly equipped, and that there was no provision for a sudden case of amputation or gunshot wounds. The surgeon-general has no authority in appointment of medical officers to regiments. This is done by the colonels, and, as a result, one of the medical officers of a regiment is a homeopathic doctor, and he (the surgeon-general) consequently gave him nothing to do, not being willing to trust him professionally.

All the general officers, the colonels, and some of the other field officers have seen service in the late war, and are able and efficient in their several spheres. The company officers show a willingness to learn. All the officers present in the camp, with one exception, wore the prescribed uniform, and all evinced a prompt and cheerful spirit in the faithful performance of their duties. A kindly feeling noticeably exists between the several organizations drawn from all parts of the State. The officers set a good example, and this had much to do in keeping the men on their good behavior, so that no complaints could be made on the score of discipline. Under the able and efficient command of Major-General Carroll excellent order was preserved during the entire time of the encampment, and I gladly express my satisfaction with the Kansas National Guard, and trust that it will always be worthy of the confidence and liberal support of the people of Kansas.

The strength of the regiments when paraded for inspection was as follows:

Troops.	Officers.	Men.
First Regiment.....	29	243
Second Regiment.....	29	315
Third Regiment.....	26	321
Fourth Regiment.....	25	867
First Light Battery.....	5	50
Total.....	114	1,396

NOTE.—The above does not include the non-commissioned staff.

The regiments of the Kansas National Guard are proficient in drill in the following order, respectively: First, Second, Third, and Fourth.

The companies were found to be proficient in the order following: First, Company A, Third Regiment; second, Company A, First Regiment; third, Company E, First Regi-

ment; fourth, Company G, First Regiment; fifth, Company F, Second Regiment; sixth, Company A, Second Regiment; seventh, Company F, Third Regiment; and eighth, Company F, Fourth Regiment.
Respectfully submitted.

C. E. COMPTON,
Lieutenant-Colonel, Fifth Cavalry.

FORT ADAMS, Newport, R. I., September 30, 1886.

The ADJUTANT-GENERAL UNITED STATES ARMY,
Washington, D. C. :

SIR: In compliance with Special Orders No. 184, current series, from Headquarters of the Army, dated Adjutant-General's Office, Washington, D. C., August 10, 1886, and accompanied by letter of instructions, under which I acted, I have the honor to submit the following report of my inspection of the annual encampment of the National Guard of Connecticut, held at Niantic, Connecticut, August 23 to 28, inclusive:

I arrived at Niantic early in the morning of the 23d of August, and reached the State encampment grounds, which lie just beyond the town upon the Niantic River and Bay, previous to its official occupation by any of the incoming troops. A single company of one of the regiments had been allowed to come into camp the Saturday before, but was at this time upon no special State duty.

After having reported my presence to Brig. Gen. Charles P. Graham, commanding the brigade, by whom I was most courteously received, I proceeded to the quartermaster-general of the State, Brig. Gen. Arthur L. Goodrich, by whom I was provided with a fully-equipped wall-tent (located among those of the general staff), as also with suitable attendance, and was by him presented to the several other officers of the general staff as they successively arrived. During my continuance in the encampment the honor of messing with these gentlemen was extended to me, of which privilege I availed myself, together with several invitations to join the staff of his excellency the commander-in-chief, Governor H. B. Harrison, upon special occasions. From all in authority I received a most cordial welcome, and every facility was given me to thoroughly investigate all the features and incidents of the encampment. I was furnished with mounts whenever I desired them, and remained in camp from before its beginning until after its tents were struck.

I made several special inspections in company with the brigade inspector, and frequently made independent ones throughout the encampment, passing continuously through every company street, and becoming thoroughly acquainted with the spirit which seemed to actuate all who had gathered there under arms. During all the drills I wandered from point to point, stopping here and there to notice maneuvers, commands, and execution, viewed with interest the excellent ceremonies in their daily routine, and gradually became convinced that there was quite as much for a regular Army officer to learn, to his own benefit, in one of these State encampments as for him to impart.

The time between reveille and retreat was completely taken up with drills and ceremonies, so that merely as a spectator I was quite exhausted at the close of each successive day.

All of the work and routine seemed to be cheerfully done. I heard but little grumbling, and even this appeared to be always due to misinformation and over anxiety, and found that almost every one with whom I came in contact was working earnestly, according to his light and ability, toward the perfection of the command. Of course I noticed here and there minor tactical differences, which will in time correct themselves, and some glaring faults, a hold of which the State of Connecticut must take a firm grasp in order to eradicate them and raise the standard of active efficiency of its guard.

I have not felt called upon to descend into the particulars of graduating the several regiments and organizations which came beneath my notice. This lies particularly within the province of the inspector-general of the State, and is entirely internal to Connecticut.

I noticed a wholesome rivalry throughout the entire command, and was not long in perceiving that the competition for excellence descended into almost every incident of camp life. Each regiment, so far as I could judge, excelled in some particular point of drill, marching, internal police, discipline, steadiness, adherence to the State code, appearance, manual, &c. They all did well, and better than this, improved daily. The close system of marks pursued by the inspector-general of the brigade, whose ultimate stumming up grades the various organizations, appears to me to be all that is requisite for the self-information of those concerned, and if they severally exercise themselves in correcting their deficiencies, as annually marked down and published, the ultimate re-

sult among men in such close competition cannot but render even their graduation a very difficult task in future encampments.

The annual encampment was named Camp Smith, in honor of the present adjutant-general of the State. It had already been laid out, and some 950 tents pitched by the civilian employés of the quartermaster's department, acting under the quartermaster-general and his assistant. It conformed to tactical requirements, and to the circumstances of location, and presented a picturesque, military, and imposing appearance. A better site for a permanent military encampment can hardly be conceived, and I doubt if any other State in the Union has its equal. It is easily approached by land and water, and may be as easily defended. The Shore-Line Railroad runs by it, having a station within half a mile thereof, at the town of Niantic. Over this line it is in direct communication, east and west, along the whole coast of Connecticut, and beyond, while at all the principal cities on the shore of the Sound other important railroads run northward through the State. From this railroad, within the space of two hours, the whole brigade, with all its baggage and equipments, was easily debarked, the regiments themselves gaining camp successfully within the time specified, and most of them mounting a guard within from half to three-quarters of an hour from their arrival at the depot. They had severally started for this concentration from every section of the State. Over this same line of railroad, on the 24th of August, the heavy carriages and chassis for the new 10-inch sea-coast guns were brought and debarked, and thence drawn to the encampment the same day. By water, in a large lighter, on the first day of the encampment, the guns themselves (two 10-inch Rodmans) and mortars (four 8-inch siege), with all of the appliances for disembarking, mounting, and service, were brought to within ten feet of the low-water mark, directly off the site chosen for the sea-coast battery, now in process of erection. Thence they were also disembarked as easily as if upon an ordnance wharf, and were actually used for drill and mortar practice upon temporary platforms the last three days of the encampment. Such facilities as these are of manifest military importance, and give evidence of the skill and judgment of those by whom the location was selected. Off Niantic in the bay, and still further in the Sound, the largest ships and transports may safely ride at anchor. Ample wharfage facilities await development at Niantic, and the whole is within easy access of Fisher's Island—a key-point in the defense of Long Island Sound.

I am assured by the officers of the State National Guard medical department that Niantic, and particularly this encampment ground, is a most healthy locality. The fact that the consolidated morning report of the brigade for August 27, 1886 (the fifth day of the encampment, and the successor of its warmest as well as hardest working day), shows but 9 as "sick," out of 2,259 "present," fully bears out this estimate. The nearness of salt water affords ample opportunity for bathing, while the proper employment of the tide and river can easily keep the surroundings of a tidy, well-policed camp perfectly healthy.

Upon this ground I should judge that 4,000 men (a brigade such as this year there encamped, only in absolutely full complement) could conveniently be accommodated, and yet leave ample ground for drill and ceremonies, particularly if the additions suggested be made.

BRIGADE CAMPS VERSUS REGIMENTAL.

This was a subject fully argued upon during the encampment, and upon it diverse good opinions were advanced; but the balance of the summing up appeared to me to be upon the side of the brigade encampment. In the State of Connecticut such a rendezvous brings together its entire active militia (its whole army, so to speak), and the mutual observation thus made possible becomes a potent and by no means silent factor of military education. Such encampments also enable the whole force under the State arms to become at least acquainted with its superior officers, and gives rise among the rank and file to a spirit of emulation which cannot lead troops rearward. Of course in such large aggregations of men there is a tendency to give too much time to brigade matters rather than to the subordinate, though far more important, ones of regimental and company affairs. However, in Camp Smith a very just balance was secured in this respect. Company drills once a day (one hour each) and regimental ones twice (two and a half hours in all) afforded ample scope for practice in such tactical maneuvers as are impracticable at home. The nature of these was left to the judgment of the regimental and company commanders themselves, but on account of the diversity of such judgment I am convinced it would have been much better to have controlled the character of the drills from brigade headquarters. This was particularly so in the company drills, for as battalions do not often get together, save in camp, the entire drill is proper. Companies, however, are supposed to be already thoroughly familiar with all their school tactics before arrival, and in camp the skirmish drill becomes of paramount importance, just as on the future field of battle it will be more and more so.

Too much time was wasted in the primary tactics and not enough devoted to the anticipation of real field-work. This I am convinced will receive correction in another year, for the criticism I make upon it was gathered from the conclusions of all with whom I conversed. There are seven battalion and five company drills possible during the encampment, *i. e.*, about nineteen hours to the former and, five to the latter, by the schedule. At least three and a half hours (two drills) of the regiment and three hours (three drills) of the company should be devoted entirely to systematic skirmish drill, and the rest of the time devoted proportionally to the schools of the regiment and company. This is not too little time for company tactics as such, for not only is it supposed to be already well drilled, but reviews its tactics in every battalion drill. The encampment is primarily for the regiments, secondarily for the brigade, and only finally for the company, while over and above all it is for the individual soldier's instruction in all those special and active duties of the field which in modern warfare tend more and more to isolate him as a self-reticent unit—be it upon the skirmish line or chain of sentinels. As the National Guard changes its *personnel* at the rate of about one-third per annum, it might be economy, in education, to have the encampment take place by regiments only for two years, every third year being devoted to a general muster of the whole brigade. In this way the several advantages of each style of encampment would be relatively realized by all concerned, while the special education of the individual would certainly be advanced.

STRENGTH.

The following organizations were in camp: First Regiment, Col. William E. Cove; Second Regiment, Col. W. J. Leavenworth; Third Regiment, Col. George Haven; Fourth Regiment, Col. T. L. Watson; Fifth Battalion (colored), Maj. F. M. Welsh; Battery A, Captain A. S. Fowler. Upon these bodies of troops the chief military reliance of the State reposes; they constitute its single brigade of active militia. But besides this enumeration there are several companies of governor's guards and independent companies, more or less recognized and supported by ancient charters and legislative acts. These are available for some few special or extra duties, and will be noticed hereafter. The strength of the brigade, as represented at this encampment, may be gathered from the following table, showing its consolidated morning report for August 27, 1886, the fourth morning of its field service; it is as fair an average as to presence on duty and absence for cause as can be given:

Troops.	Present.		Absent.		Total present and absent.		Aggregate.
	Officers.	Men.	Officers.	Men.	Officers.	Men.	
Brigadier-general and staff.....	9	2	1	.....	10	2	12
Battery A, Light Artillery.....	5	71	.....	2	5	73	78
First Regiment Infantry.....	35	471	.....	51	35	522	557
Second Regiment Infantry.....	42	568	.....	50	42	618	660
Third Regiment Infantry.....	32	352	1	36	33	388	421
Fourth Regiment Infantry.....	35	460	.....	31	35	491	526
Fifth Battalion Infantry (colored).....	13	164	.....	22	13	186	199
Total.....	171	2,088	2	192	173	2,280	2,453

The attendance at the annual encampment was large beyond precedent this year; 95 per cent. of two regiments answered the first roll-call, and upon the morning chosen for the above consolidated report 92 per cent. of the entire brigade was in camp. This was also about the average per cent. present during the week. Taking the strength of this brigade at 2,453, the governor's staff at 11, and allowing a margin of some 36 as clerks, semi-civilian employés, &c., the entire brigade may be placed at about 2,500 men. This is about one-tenth the strength of the regular Army. In both cases the independent detachments, which would swell them to about 2,900 and 29,000, respectively, are left out. Such a showing, for a State that stands twenty-seventh as to inhabitants, which do not probably number more than one-ninetieth of the entire population of the United States, is certainly remarkable.

THE GOVERNOR'S GUARDS.

These troops exist under special charters, and claim not to be liable for active service. As a battalion they are divided into four companies, two of horse and two of

foot, and number some three hundred and twenty men. They are not under control of the State adjutant-general's office, though each company is supposed to forward thereto, annually, a muster-roll. Such as are thus received are, I am informed, very meager in data. They generally form the escort of the governor upon state occasions, and did so upon governor's day at Camp Smith. They were a fine body of men, and many of them beyond military age marched excellently, and in their old-fashioned and handsome uniforms presented an imposing appearance.

INDEPENDENT COMPANIES.

There are two independent Irish companies and one of colored troops. The Putnam Phalanx is also independent, is located in Hartford, and composed of eminently respectable men. None of these bodies are recognized by the State, save by charter, or the issue of arms, &c. They number in the aggregate perhaps three hundred men, but no data exist in the adjutant-general's office concerning them, nor will it probably ever make any use of them. It strikes me that it is concerning just such organizations as these that the most reliable data should be gathered, even if it be unofficial. The bureau of military statistics, to which I shall refer later on, should learn all about such bodies as pretend to bear arms peaceably in a State.

MILITARY ENROLLMENT.

This is not complete yet for 1886; it will not change substantially from last year.

PERSONNEL, DISTRIBUTION, RECRUITING.

The *personnel* of the command was generally very fine. The troops from the large cities and towns were naturally better "set up" than those from the more rural districts, but the entire rank and file seemed to be of the very best material, young, active, willing, athletic, and intelligent. I mixed in among them freely enough, though always "on duty," to fully sound the "metal" of the command, and found it always responsive and eager for information. I took occasion once or twice to very sharply criticise individuals and here and there unmilitary occurrences, doing so in the interests of discovering the true *animus* of the men about me, and I never once saw the least disposition to resent, answer back, or question. I am therefore completely satisfied that those who enlist as National Guardsmen accept the whole obligation of a soldier, and merely look upwards for leaders and commanders. Where they find these wanting I doubt not that these men, who carry the elective franchise into their very military organization, are American enough to chafe and worry in the traces till they obtain a master in whom they can trust to the very limits of his sphere. I could not help noticing the natural balance which seemed to have been struck between rank and age among the company officers. While a small proportion of the captains appeared to be old enough to have seen some service in the rebellion, I noticed few, if any, of the lieutenants who could have done so; they were mostly young men, and as a class did not exhibit that unfortunate disparity between rank and age which now so hampers the active efficiency of the Regular Army. But in the higher commissions of this Guard the very reverse still seems to maintain its suitable ascendancy, service and experience having, to a large extent, undoubtedly been the criterion by which these grades were filled, so that age justly lends its credence to the dignity and command so essentially inherent in these higher offices.

UNIFORMS.

The State of Connecticut is wisely about to reuniform its guard so as to secure at least a fundamental similarity throughout its whole brigade. The present uniforms, of diverse patterns, according to regimental preferences, are now over six years old, are quite worn out and ready for condemnation. The basis of the already adopted change is the uniform of the Regular Army as to cut and cloth, but the trimmings and pipings, together with an inch stripe upon all the trousers, are probably to be of white. This change was brought about by the mutual agreement of those concerned, and has by common consent been adopted in every regiment. It will go into effect during the current year. I presume the selection of white as the color for the facings has been the result of that desire for assimilation to the Regular Army which has dominated the more radical change of the entire uniform.

TENTS AND EQUIPAGE.

The State owns 675 A-tents, 237 wall-tents and flies, 4 colonel's wall-tents and flies, 2 headquarter tents complete, and 4 marquees. They are in good condition. It possesses no hospital nor mess tents. The troops present in Camp Smith lived in A's. The

other tents were used for the staff and other officers tactically. They were all pitched by the quartermaster's department before the arrival of the brigade. To do this and completely lay out the encampment required three weeks' previous labor of thirty civilian employes. Upon the arrival of the brigade commander the camp was turned over to him, and when the tents fell it was returned to the quartermaster-general. Tent floors were used throughout the encampment. All of the military stores and material of the encampment, save the tent-floors, were brought to Niantic from the State arsenal at Hartford, whither they are gathered for storage and repair at its close.

TRANSPORTATION, FORAGE.

These are of course provided by the quartermaster's department. The troops arrived and returned in special trains chartered at half fare.

SUBSISTENCE.

The messing of all the organizations at Camp Smith was provided by civilian caterers, but at a cost of several times the value of the ration allowance of the State. Four large and convenient permanent mess-halls are erected, one in rear of each regimental camp, and for the Fifth Battalion a commodious pavilion-tent was rented. There are also two smaller mess-halls in rear of the tents of the governor and brigade staffs. More or less temporary cook-houses stand convenient to these. The majority of each regiment messed together, and the several regiments at the same time, suitable provision being made for such men as were necessarily absent on duty. The very small percentage of camp sickness is sufficient guarantee that the food provided was of good quality and in sufficient quantity. It is manifestly impracticable in so short an encampment for men unused to taking care of themselves to attempt to live upon and within the limits of their ration, and master, at the same time, its pay proper preparation.

PAY.

All members of the National Guard of Connecticut receive \$2 per day, paid only, however, while actually called out and serving under arms or present at each stated roll-call per day during the encampment. The private soldiers and non-commissioned officers receive, in addition, one ration, valued and commuted at about 30 cents. The commissioned officers receive certain additional perquisites and rations. The expenses of the State in maintaining its guard are, as a total heavy, but relatively they are very light—less than 20 cents per inhabitant per year; but these are practically covered by the military commutation tax, some \$105,000 annually, paid at the rate of \$2 per poll by the unenrolled militia for their exemption from duty. Considered, however, internally to the guard itself, the expense of every member of the active militia are far beyond the limits of their small stipends.

ADMINISTRATION AND DETAILS IN GENERAL.

These, as to duties and staff routine, are all contained, together with much other valuable data and information, in the State Military Code Book, a copy of which was kindly furnished me by the adjutant-general of Connecticut for my guidance. I forward it herewith, together with copies of orders, &c., and respectfully refer the Adjutant-General of the Army thereto for such special information as within the scope of this report is deemed superfluous.

CEREMONIES, DRILLS.

With the ceremonies I was most favorably impressed, and saw in them a steady improvement as the encampment gained in age. Brigade dress parades took place each afternoon, and were beautifully executed. They were immediately followed by regimental ones, which were equally well performed—quite as well so as they are in the Regular Army. Here and there I noticed some differences in minor tactical construction, but no graver ones than I meet with at Army posts. They were generally founded in personal equations, and modified themselves during the brief period of comparison allowed by the encampment. I noticed no radical errors after the first day. The manual of arms was often perfect, the forming of lines prompt, and the steadiness of the men notably commendable. I saw no battalion inspections, no "setting up" drills, and no brigade drill. It would have been well to have omitted one or two brigade dress parades and substituted in their stead the ceremonies of regimental inspections and individual reviews and musters, and even to have escorted the colors at least once.

Company drills took place once daily and battalion twice. I have already criticised them. I saw no systematic battalion skirmish drill. A part of the last two or three company drills was devoted to skirmishing. This, as a rule, was not accurate, without spirit, disorganized, and poorly executed. The best drill of this description was given by a company of the colored battalion, whose captain directed it himself with the bugle. The men of this company understood the drill, responded promptly and tactically, and showed a battle-field independence. Throughout the brigade the men were hard worked, but cheerful withal and always willing. In certain regiments, however, there was such a continual "buzz" of unchecked conversation that I could not but wonder how on earth commands were ever heard at all. This was the fault of a very large percentage of poor company officers and file closers, and was demonstrated to be so at the company drills, which, upon the whole, were the poorest drills I saw. But there was continual improvement up to the end of camp, though in an elective system there should be little theoretical room for even this criticism. I have no substitute to offer for such a system of obtaining officers, but am convinced that if it continues open to such objections one must be found. It is so different from regular Army methods, and from the purely business procedure of these same men in their capacity as citizens amidst their various monetary avocations, that I simply wonder at its continued life. It seems to be forgotten that so soon as these troops are mustered into Government or actual service, *lives*, not dollars, will be the stock in trade. Proficiency, fitness, and merit will then be the sole criterions by which warrants and commissions are held and all new appointments made. However, it is but just to remember that sixty-three of the officers of this brigade were new to their positions, and were actually examined for them during the encampment. Nevertheless it was a lack of *foræ* rather than tactical information that I criticise, though I gained the impression that the officers seemed to fit themselves more for their *own* special tactical duties than for those of any superior grade or all grades which the exigencies of service might have forced upon them.

DISCIPLINE.

This was generally excellent; but when analyzed down to its roots, was not so. An apology is usually made where laxity of discipline is noticed in national guard organizations, based upon the essential difference of their circumstances from those surrounding similar regular organizations; but this is begging the question, and there are notable exceptions within the guard itself which disprove the fact. I do not recognize the impossibility of obtaining true discipline in the national guard, for I am personally familiar with the very elements which go to form it, have commanded it for years, and know it can be molded like clay, and is willing to be shaped.

SALUTING.

This fundamental principle of discipline, which when thoroughly inculcated and properly understood so fosters the higher grades of unquestioning military obedience, was almost wholly neglected at Camp Smith. Not more than 2 per cent. of the entire rank and file pretended to recognize an officer or a shoulder-strap. One afternoon I walked through the entire length of the company streets of the whole brigade; in the Second Regiment I did not receive a single recognition; in Company I, of the Third Regiment, I obtained the first proper salute, from a soldier who arose, stood attention, and recognized my rank awkwardly but properly. I spoke to and complimented him. I found the insignia of a commissioned officer recognized among the colored troops better than anywhere else, and believe that the elements of true subordination were sown through this small and earnest battalion upon ground more deeply furrowed at home by proper instruction than in any other body of men represented in the encampment. In the First and Fourth Regiments I got here and there (one or two per company) a recognition. I tested the matter for my personal satisfaction by speaking once in awhile to a soldier who had not saluted, to try the spirit of the men about me, and found that it was only ignorance, lack of instruction, and the more general failure of the officers throughout the command to enforce the recognition on the spot. It was a common thing (so glaring was this ignorance or neglect of the fundamental principles of military courtesy) to be passed by private soldiers with pipes and cigars in their mouths, blouses unbuttoned, hands in their pockets, and staring countenances, even upon the general parade ground, and as often in the town of Niantic. But here, too, there was considerable improvement toward the end of the encampment, so that the percentage of recognition may perhaps have been raised to 10 per cent. It certainly did not rise above this, and I noticed that it improved particularly in the Second Regiment, which I had criticised quite severely the second day. I do not believe there was any intention of insubordination

manifested in this matter; quite the reverse; it wore the garb of ignorance and non-instruction only. Nor did I notice any display of disobedience or direct insubordination while in this camp.

GUARD DUTY.

The large guards at Camp Smith were severally mounted by the adjutants of the organizations which furnished them. There were regimental guard mountings only, not brigade, and each one complete in *personnel*. The ceremony of guard mounting was generally above important tactical criticism after the second day of encampment, taking into consideration that fully one-third of the brigade had never been in camp before, and that the guards themselves were almost wholly composed of this raw element. They were new to almost any duty, and wholly so to this. But this ceremony is essentially an officer's drill, and those charged with it mastered the circumstances as well as regulars could have done. Special guard posts were assigned to the several regiments, and along the various fronts of the encampment each main guard ranged its own line of sentinels. The object was to gain the maximum of instruction. A brigade officer of the day represented the commanding officer, and through him the subordinate officers of the day were made responsible to the brigade commander. The whole line of guards became *de facto* a brigade guard. The conception was excellent, and had the subordinate officers attended to their several duties and been duly familiar with them, no criticism perhaps would have been possible. As it was, however, this feature of the encampment showed a decided want of true conception, and was so badly done as to afford no protection whatsoever to the command that lay behind the chain of sentinels. I am convinced that I could have penetrated the camp easily, and almost anywhere, with a body of armed men. Once on post, and left to themselves, the sentinels appeared to be far beyond their depth, awkward, automatic, without confidence, and either wrongly instructed or else utterly without any due appreciation of their duties, responsibilities, and inherent authority. To see an insignia of rank saluted was a rarity, and to see it properly done the exception of an exception; challenging was a farce, and the countersign useless. Yet all of these men were willing and eager for instruction; they did their very best. It was instruction and experience only that they lacked; it should have been begun at home, for it is manifest that if so important a duty be left (for all grades) until the moment of need, it cannot be even shadowed in its true proportions, and must be what it was, the mere ghost of what it might have been.

Guard duty is the nearest approach to really active duty the National Guardsman performs in camp, and yet it is the first one he is liable to be placed upon in time of public excitement at home. Surely a few drills per year can be spared by men who generally drill so well in an honest preparation for those serious calls which it is well known may come at any moment. I doubt not that voluntary detachments would willingly guard the armories, night after night, until proficient in all the details of sentinels' duty. I am informed by officers who have visited other State camps that organizations do exist that have already appreciated the importance of this duty, and have become remarkably proficient therein. Connecticut is not so; and as this is a radical deficiency, it is one which merits serious consideration. At the request of the brigade commander I spent the entire fourth day of the camp instructing the guards and sentinels in their several duties, and almost the entire night in visiting the men and guards on duty, making grand rounds, inspections, &c. I found all grades wide awake for information, and was fully repaid for my labors. There was a marked improvement; though single-handed, I was very much handicapped, and on the last night of the encampment I was pleased to find sentinels and whole guards which did their duty noticeably well. Yet upon this very night there was one regimental guard which, from its commissioned officers down, had apparently withdrawn themselves, and were neglecting every single duty with which they had been charged. A word to the wise is sufficient. I am satisfied that this woful deficiency can be eliminated, and I would earnestly recommend that special attention be paid this winter, while at home, to rigid sentinel duty, so that its performance may, at the next annual encampment, excite a word of worthy praise from whomsoever may have the pleasure of inspecting it in behalf of the General Government. Each soldier of the brigade should be furnished with a printed slip containing brief instruction in all his duties as a sentinel, and should learn them by heart and head. It needs both theory and practice, and every grade of regimental officer should know the whole duty of every grade, both from tactics and their own code. Armory drills in simple guard mounting should be succeeded by practical drills on post with small detachments night after night, and if all concerned in each company will give it due attention a radical deficiency will soon become obsolete.

SIGNALING.

Considerable attention was paid to this important subject. The new Army and Navy code was adopted some three weeks before entrance into camp, and about 12 per cent. of

those instructed were already able to send and receive ordinary messages with the flag at its opening, and probably double that number ere the encampment ended. There is a general signal officer, with the rank of major, attached to the brigade staff, who also acts as its chief engineer. Upon each regimental staff there is a signal officer, with the rank of first lieutenant. The *personnel* of the corps proper is made up by detailing two privates from each company on special duty therein. They drill at the code about once a week during the drill season at home, and during the encampment reported at brigade headquarters, under their regimental signal officer, at each battalion drill hour. Here they received special orders and moved off to stations for practice.

The State possesses thirty-seven signal kits, made in Hartford, one for each company of the brigade, and the entire signal corps numbers some 6 commissioned officers and 68 enlisted men. They are uniformed like their regiments, but wear the cross signal-flag device upon the arm. When not on signal drill they are required to report for regular tactical drills with their proper companies. Besides the kits for flag drill and practice, the State owns a field telegraph line, consisting of poles, 2 miles of wire, suitable attachments, and a supply of intrenching tools. Telegraph instruments are hired when necessary; and for the encampment a telephone system was thus procured, set up, and run by the signal department.

GATLING-GUN SERVICE.

To each of the four regiments of Connecticut National Guard there is attached a section of Gatlings, caliber .45, of good but now somewhat old pattern. They are very well drilled in the whole manual of the piece and in field maneuvers, and are manifestly an important factor in the State armament. These detachments are under the command of lieutenants, and are uniformed as artillerists. In ceremonies they parade upon the left, action front, of their respective regiments, and at battalion drills act with some latitude and independence, according to the nature of the general movement, or else are detached for special purposes. Besides these regimental sections a regularly organized flying battery of four to six pieces might yet prove its value inestimable to this or any other State.

LIGHT ARTILLERY.

There is but one battery (A) in the State. It is mounted but two or three times a year, and thus with horses does not have more than ten days' annual drill on the average. This being considered, its proficiency is remarkable. There was rather too much fast gait and some loss of distance and interval in its drill, which the foregoing circumstances seem to explain. With the brigade inspector I made a mounted inspection of this battery, as much for drill purposes for them as for special investigation. It was in good condition, and the officers and men seemed to understand their duties. At my request the captain put the cannoneers through the manual of the piece, by hand to the front and rear, ready, &c. There was a lack of snap, but withal, in the foot-drill proper, a good knowledge of their duties.

The expense of artillery maintenance renders it a very difficult arm of the service to criticise; and in attempting to keep up even a single battery, Connecticut is ahead of her proportional share. The horses seemed well groomed and cared for; a number of them were the private property of the men, but were hired for the encampment. The officers appeared zealous, and must have been proficient to have brought the mounted drills up to their present standpoint in so short a time.

There is no cavalry in the Connecticut National Guard.

HEAVY ARTILLERY.

Upon the day the encampment opened the heavy guns furnished in accordance with Congressional law arrived, and measures were taken to land them at once. This part of the work was under the direction of Capt. Charles W. Whipple, United States Ordnance Department, and was expeditiously accomplished. First Lieut. Samuel R. Jones, Fourth United States Artillery, having been detailed by War Department orders for the purpose of instructing the troops in heavy artillery, superintended the laying of platforms for temporary practice during the encampment, and at the close of the third day several drills had already been had by special details. From the landing of these munitions by the ordnance men under Captain Whipple, all the labor of moving, laying, and drilling was done by guardsmen. A noticeable amount of interest was displayed in this new feature of instruction, and remarkable proficiency in handling the mortars developed in a very short time. On the afternoons of the fourth and fifth days six shells each, to the total number of twelve, were fired from these mortars to a point upon the general parade ground nearly opposite the headquarters flag-staff. The prac-

tice was excellent, such a degree of proficiency being attained as to land the whole number into a very small, dangerous space. Of course, fuze-plugs only were blown out. The entire command, together with some 10,000 spectators, witnessed the practice, and one group of visitors from very uncomfortably close quarters, as the first shell landed quite within 5 feet of a citizen and covered him with dust. Previous to the firing, upon each day, double lines of sentinels running east and west were established to keep the parade ground clear, and a skirmish line of sentinels passed over it between them for the same purpose. Nevertheless it was impossible to do this effectually, and it is manifest that no little danger must always attend this practice if it be continued in future years. There is additional danger in the liability of the out-driven fuze-plug to maim or perhaps even kill some spectator, or of even an accidental weak shell being actually ruptured. It would be far better to throw the shells seaward and use full bursting charges. For the sake of the experience and practice gained, the Government can easily afford a small annual expenditure of its surplus and almost obsolete ordnance stores.

SMALL-ARMS, EQUIPMENTS, AMMUNITION, ETC.

Besides the small-arms in the hands of the brigade, the State owns, in store at its arsenal, two hundred and forty-eight Peabody and three hundred and twenty-seven Springfield breech-loaders, caliber .45. One regiment in camp was armed with Springfield, the other troops carrying Peabody guns. The arms were in good but not in excellent condition. They are only cared for by regular armorers. This is probably necessary in the National Guard, as the arms are necessarily left at the armories. Under existing circumstances, however, a soldier can hardly feel a special pride in his own weapon, and understands but little of its care. All this changes in protracted active service, and will right itself. I only saw the arms used with blank cartridges, and was surprised to find that at least 10 per cent. of the shells stuck so badly in the Peabody arm that they had to be extracted with the ramrods. Three or four stuck in this way after every discharge in several of the companies behind which I was standing during drill, and had they been ball cartridges in action the men would, in these days of wonderful arms, been demoralized. I examined these shells and found them so peculiarly crimped that they split almost invariably and anchored themselves.

The equipments were in moderately good condition, and consisted of belts, cartridge-boxes, bayonet-scarbards, canteens, haversacks, and knapsacks. These latter were of the usual (light board box covered with enameled cloth) pattern; in marching order overcoats were rolled and carried upon them. Commissioned officers are expected to equip themselves, and are allowed \$10 per year on account of equipment fund. Their kits are carried for them, and would be limited in time of need. Enlisted men are furnished with everything in the equipment line by the State.

The State keeps one hundred thousand rounds of ball cartridges for the small-arms constantly on hand at its arsenal, and probably had sufficient for an emergency in the camp. It used blank ammunition very freely during the encampment, but not wastefully.

TARGET PRACTICE.

There is no range at the State reservation, and no ball cartridges were issued or used. All target practice takes place at home, each town where there are companies of the National Guard being required by State law to provide a suitable range for practice. This practice receives about as much attention as in other States, and excites no little interest. Thirty-five shots per season are allowed within which to qualify, and accurate annual reports thereon are made by the inspectors of rifle practice, which are incorporated into the State adjutant-general's report.

FIELD DAY.

I am too firm a believer in "war on the map" and "*kriegsspiel*" on the field, not to have viewed with interest and instruction the simple problem of the attack and defense of Camp Smith, which took place as a sort of premeditated surprise during the morning battalion drill of Thursday, August 26. I had the pleasure of sitting in the brigade commander's tent while the plans were being discussed and formulated, and believe they were realized the next day so well as such matters usually are, or can be expected to be, when due so much to personality. Such matters are by no means mere officer's drills, but are of direct value to all the troops engaged, no matter upon how small a scale, nor how meagerly it may be necessary to articulate the skeleton of operations. I took no personal part in these maneuvers, save as a spectator within the camp, as upon this day I was devoting myself entirely to instructing the several regimental guards of the bri-

gade in the true principles and methods of guard duty, and the opportunity was especially good upon such a day, since it allowed me to introduce an active element into the duty; but I saw enough of these maneuvers to realize their value to all who looked below the smoke of their harmless fusilade. The very best field-day exercises for such a brigade as Connecticut sends annually into camp would, in my judgment, be a regular brigade drill "*across country*" with 40 rounds of ammunition, canteens filled, and haversacks provided with one day's rations. Such a drill could start with the deployment of a regiment as an advance guard feeling its way into action, covering at length the whole front of operations, and maneuvered, relieved, &c., to suit circumstances. In the mean time the remaining regiments and batteries should be maneuvered so nearly tactically as possible in forming lines, masses, columns, &c., changing fronts, occupying new positions in advance and in retreat, studying, in fact, topography in its modifying relations to mere maneuver as such. October, or perhaps even November, would be the better time for such work, as then the area of operations could be extended, for harvests would be garnered, and little, if any, damage done to crops. Private property should, of course, be respected, and the really arduous labor of simply combating with nature herself be an experience worth the expenditure of energy involved. Several of the regiments have at home during the late fall special field-day problems to solve, which are of positive interest and value, and even single companies can study this subject; but these annual ones by the whole brigade should be the subject of study and preparation long before the actual trial. Maps of Niantic and its surrounding country, drawn to a large scale (10 inches per mile), should be in the hands of each regiment and company commander, and the orders of the day, if possible, divided into three or four successive periods, be prepared and mastered by all concerned long before the encampment. The need of even indicating an opposing force is not apparent under the limited circumstances of available troops. Nature is hostile enough, and a foe whose subjection will require the expenditure of every energy. In a well-executed drill of this description the imagination can easily supply a hostile line to those who are alone concerned in the matter, and nothing at all should be done to cater to the uninstructed spectator.

GENERAL OBSERVATIONS AND CRITICISMS.

There were too many men excused from each of the several duties and ceremonies. These men loafed about as merely unmilitary spectators at all brigade and regimental dress parades and drills. This should not have been allowed, as they were not only out of place but in the way. I saw this corrected in one instance, where just previous to the parade of a regiment a truant soldier was arrested on the general parade-ground, and made to join his company—a proceeding which impressed me as one of the most military and beneficial things I had ever seen in the National Guard. I notice that a small percentage of men "*cut*" the roll-calls and drills, hiding in the rear of the tents, &c. Punishment in some form or other would correct this evil. The guard was continually in full dress, much to its inconvenience and inefficiency. The few sentinels about headquarters were properly in full uniform, but I am convinced that better work would have resulted had the body of the guard been allowed to wear fatigue so soon as mounted. One relief—the one just off post—was always allowed to go to camp for two hours. This seemed short-sighted, especially in a camp of instruction, in which sentinel and guard duty needed so much attention. It resulted in these men being continually behindhand in reporting back to the guard-tents; nor did those not on post appear to be under any instruction while awaiting their tours of duty. Very little attention seemed to be given to the selection of special sentinels for special duties. Setting up drill seemed to have been pretty generally neglected at home, and was not attended to in camp, although fully one-third of the command were recruits. While the manual of arms was performed splendidly on parade, it was carelessly and improperly executed by independent sentinels on post, and at the formations of guards and reliefs, as well as on company and battalion drills. I was passed by many reliefs and detachments under command of non-commissioned officers, but never once saluted properly; generally no salute was given, and almost always when one was attempted it was erroneously given, and with such a lack of confidence as made it of little value either to the recipient or giver.

Provost service in the town of Niantic was fairly good, but, as a rule, officers seemed loth to exercise their full power as men actually "*on duty*" under State law and with full police authority to quell disturbances at their very inception. I think the State would find it advantageous to raise a high board fence for at least 100 yards on each side of the southwest angle adjoining the main entrance, and provide a movable obstruction across the road, so as to impede egress and ingress after taps. This and a substantial guard-house, with a few cells for that particular point, would, as the camp is in theory permanent, greatly facilitate the arduous duties of the detachment located there.

As particular instances of the noise after taps, I would remind the National Guard of Connecticut that a shot fired at night should have alarmed the whole command and brought every guard to arms. Such shots were fired several times in the camp without so doing. They should at least have subjected the offenders to summary punishment. If the forty-first article of war bears so severely upon an officer, how supremely unmilitary must it be in a soldier to commit any act that will unnecessarily alarm a camp. This and the occasional blowing of horns and loud shouts by groups of men after taps, particularly the last night of the encampment, might have given a very wrong impression to a stranger of the true spirit which actually did control the large body of men present. That these matters were not peremptorily stopped by those on the spot and the offenders immediately given up to punishment and example must have been the fault of non-vigilant company officers, for they alone could reach their locality at once. It is no excuse that the last night of such an encampment is given up to jollity. Latitude was generously given by the brigade commander in the extension of hours and in the permission of a proper celebration by fire-works, &c., but the occurrences to which I refer were abuses of the privileges, and if persisted in would have justified the immediate disbandment and ejection of the company in which they occurred unchecked. They were rare instances, and were condemned by 99 per cent. of the brigade.

ARMY OFFICERS AS INSPECTORS.

The influence of this detail is, in my judgment, of positive importance, both to the State troops and to the General Government, as well as of immense value to the officer fortunate enough to be so detailed. The former are truly earnest after information and justly emulous for well-deserved praise. They would not seek inspection were this not so. The General Government is directly benefited in sundry ways, and the officer so detailed has his views so broadened that he were but a poor soldier did he not return to his cramped and humdrum peace duties renewed in the confidence of his country's inherent invincibility, and hopeful even amidst the general apathy that the day of true awakening is near. It is a revelation to find the States have accomplished so much in the face of odds so great. But this is a seed harvest only. It must be sown again, perhaps resown, yet the income means at length the surplus strength of the earth, its ultimate balance of power. It is a labor of no small moment to inspect a brigade of troops in a week, and determine their real needs in various directions. There is little time for the good fellowship with which the national guardsman's inborn hospitality tempts one to turn aside from matters of far greater future concern. A regular officer is asked for advice and for facts upon every conceivable branch of his profession. His answers are almost always unquestioned, and are regarded as authority. Nor can he be too guarded in his utterances to strangers, lest his words be somehow used to lend a weight to internal politics, with which, of course, he naturally has even less to do than with the broader party questions of the nation. Like the college detail, but in a far broader sense, this one is capable of benefiting all concerned, and will be an important factor in the solution of our military problem.

REGULAR TROOPS IN STATE ENCAMPMENTS.

I would further recommend that whenever practicable the sending of as large a detachment of regulars into camp with State troops as possible, and as already pursued by the War Department, be continued. There is manifestly a double advantage thence to accrue. It will brace regular troops and officers up if they wish to maintain their professional prestige, while at the same time it will teach by direct example an infinity of details which codes and systems, regulations and tactics, do not and can not cover. It will teach discipline and its methods, subordination and its necessity, military courtesy and its influence. If I at all understand the spirit of the War Department in its letter of instructions to officers now detailed to inspect State encampments (and a similar letter but more broadly comprehensive should be sent to officers commanding regulars so encamping), then it is my firm conviction that duty performed in or near a State encampment by regulars can not but quickly realize the ends in view.

NATIONAL GUARD AT REGULAR POSTS.

Looking still further toward increasing the efficiency of the National Guard, I would recommend that in the same manner in which regulars are now sent into the State camps so companies of the militia, or else several selected detachments (say of 1 lieutenant, 1 sergeant, 2 corporals, and 3 to 5 men each) to the strength of one or two companies be invited or permitted to serve for a few days at a time in convenient Army posts. Here

I would have them subjected to hard and continuous service and instruction, made so nearly active as possible. This has been more or less attempted already in Massachusetts and New York, both by officers and by regiments, though only for single days. It has not been tried in the extended sense to which I refer. In short, I would make of the Army post and its permanent garrison a regular school of instruction, prescribing exactly what shall be attempted, &c. For instance, a large guard of instruction with numerous posts would in two days' time give each half of a company no little instruction, while the half not on guard could drill at heavy guns, attend brief lectures, and be otherwise kept continually busy in genuine military duty. This duty should cover only such skeleton instruction as could be thoroughly mastered, and be confined to practical soldiering. And here again double advantage would accrue, for with enough men to instruct and men anxious to be taught, and with a real working surplus not employed upon daily, extra, special, and police duties, the regular officers and non-commissioned officers could find material with which to freshen their own experience in guard and other military duties.

GENERAL SUGGESTIONS.

I would recommend that members of the National Guard visit West Point during the encampment (for the best time say the latter part of August), and take practical working notes on all they see. The custom of visiting each other's encampments is excellent, but is at present merely personal. Much could be learned, and most valuable comparisons would result, if closely neighboring States accredited visitors officially to each other, and required reports from such officers upon the broader questions of distinctive legislation, which differs much in National Guard matters in each State. For instance, I myself saw many differences in the two encampments that I attended this year, which were directly due to differences of legislation, and profited not a little by the mental comparisons which they forced upon me. There should be more study among the subalterns; they can well afford it, and are from fifteen to twenty years younger, on an average, than corresponding grades in the Regular Army. The tactics should be looked upon more as a primer. It is, however, only actual drill that makes a good and familiar tactical officer. No amount of theoretical work and knowledge can compensate for lack of drill and absolute practice. The use of dummies or blocks in studying tactics should be encouraged; anything will answer, even a box of matches, and every grade of officer may use them to practical advantage. I think the time in camp should be employed as much as possible for such drills and ceremonies as cannot obtain in the home armories.

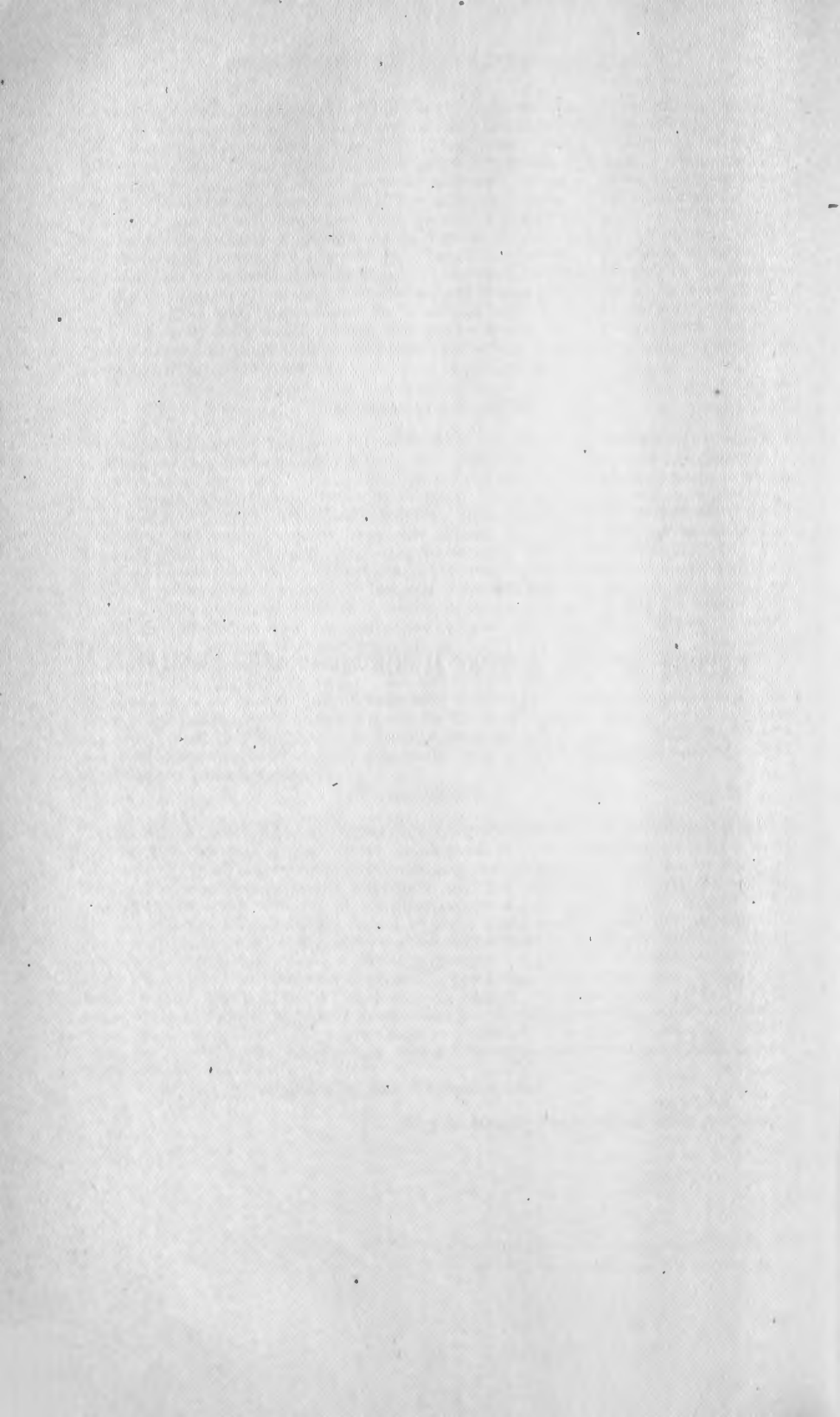
CONCLUSION.

I am deeply indebted to the United States Government for the professional pleasure derived from this visit of inspection. It afforded me an opportunity of seeing more troops in camp and under more varied military instruction than I have ever done before, and of becoming personally acquainted with the magnificent material close at the Government's hand, and out of which an army can be most readily created. No regular officer can be accredited to one of these State encampments and perform his duty with his eyes open to the future and his memory awake to our past military history without becoming enthusiastic. To the generation of younger officers the late war is simply history. But I have yet to hear of a generation of men who have escaped the clash of arms, nor do I doubt that mine will hear it. I cannot, then, but feel a deep concern in all that strives toward the solution of our military problem, and I opine that the General Government has never taken so important a step as this one, which will bring its Regular Army and its first national reserves into cordial acquaintance and more intimate accord.

I am, sir, very respectfully, your obedient servant,

C. A. L. TOTTEN,
First Lieutenant, Fourth United States Artillery.

REPORT OF THE ACTING JUDGE-ADVOCATE-GENERAL.



REPORT

OF

THE ACTING JUDGE-ADVOCATE-GENERAL.

WAR DEPARTMENT, JUDGE-ADVOCATE-GENERAL'S OFFICE

October 1, 1886.

SIR: In compliance with your instructions of August 12, 1886, I have the honor to submit the following report of the business of this office for the year ending September 30, 1886:

Commissioned officers tried by general courts-martial:

Number of records reported upon and submitted to the Secretary of War for the action of the President.....	4
Number of records received, revised, and recorded not requiring the action of the President (convicted 12, acquitted 6).....	18

Cadets of the United States Military Academy tried by general courts-martial:

Number of records reported upon and submitted to the Secretary of War.....	8
Number of records received, revised, and recorded not requiring further action (convicted 1).....	1

Enlisted men tried by general courts-martial:

Number convicted of desertion.....	426
Number convicted of offenses other than desertion.....	1,389
Number acquitted, or sentences disapproved by the reviewing authority.....	131

Military convicts tried and convicted by general courts-martial..... 1,946
6

Total number tried..... 1,983

Number of records of courts of inquiry received, &c..... 2

Number of reports and opinions rendered upon proceedings of courts-martial, miscellaneous questions of law, applications for clemency, and other official matters..... 1,189

Number of official applications from the War and Treasury Departments and Pension Office for abstracts of proceedings of trials, answered..... 1,185

Number of copies of records of proceedings of general courts-martial furnished..... 117

Of which 85 copies, containing 5,003 pages, were furnished to parties tried, and 32 copies, containing 489 pages, were furnished to the Pension Office, and other executive offices and Departments. Total number of pages, 5,492.

The number of records of garrison and regimental courts-martial, which by the act of March 3, 1877, are no longer required to be forwarded

to this office, and which have been received and filed in the departments in which the courts were held, is as follows :

Department of Arizona	879
Department of California	327
Department of the Columbia	926
Department of Dakota	2, 164
Department of the East	1, 474
Department of the Missouri	1, 512
Department of the Platte	1, 940
Department of Texas	848
Courts-martial convened by commanders of corps under the 81st Article of War	155
Total	10, 225
Total number of cases tried by general and inferior courts-martial during the year ending September 30, 1886	12, 208
Number of cases tried last year	14, 179
Decrease from last year of cases tried by general courts-martial (the first decrease in the last seven years)	345
Decrease from last year of cases tried by inferior courts-martial	1, 626
Total decrease	1, 971

Of the whole number of cases tried by inferior courts-martial (10,225), 281 resulted in an acquittal of the men tried, while 6,418 represents the number of different enlisted men tried, many men having been tried more than once during the year.

It should be remembered that a very considerable number of the trials by general courts-martial are for minor offenses, as are all the trials by garrison and regimental courts. By these inferior courts the punishment cannot exceed a fine of one month's pay, or imprisonment for one month. In a large number of cases the punishment is less than this. Nevertheless, as commanding officers have not in our service the power of punishing summarily, there is no other way of punishing for trivial offenses than by court-martial. Therefore, the statistics here given show the whole number of offenders who have received punishment in our Army for the year ending September 30, 1886. In armies in which the power of summary punishment exists—that is to say, in the armies of all civilized nations, except our own—the court-martial is relieved from the trial of the lesser derelictions of duty, and the statistics of the trials in such armies will not show the number of cases summarily disposed of—cases such as we have no way of reaching except by trial by court-martial.

In my last annual report I took occasion to invite attention to a subject which seemed to me particularly to demand it. I refer to the revision of the Articles of War. I still remain of the opinion that their revision is very desirable, and therefore would again ask that the matter may be considered. I take the liberty of extracting from the report of 1885 so much as relates to this subject :

The 128th Article of War directs that the "foregoing articles" shall be read and published, once in every six months, to every garrison, regiment, troop, or company, in the service of the United States. The "foregoing articles" cover 12 pages of the Revised Statutes of the United States. The consequence is, that it is not done, but only a part is read; and, in truth, of the 127 "foregoing articles," there are but 54 that need to be so read, as they alone constitute the penal code of the Articles of War. The remainder may be divided into two classes. One of these has nothing whatever to do with the administration of military justice, and should be entirely eliminated from the Articles of War, and placed where it belongs, amongst the general regulations for the Army.

Take, for example, the 11th article, which is as follows:

"Every officer commanding a regiment or an independent troop, battery, or company, not in the field, may, when actually quartered with such command, grant furloughs to the enlisted men, in such numbers and for such time as he shall deem consistent with the good of the service. Every officer commanding a regiment, or an independent troop, battery, or company, in the field, may grant furloughs, not exceeding 30 days at one time, to 5 per centum of the enlisted men, for good conduct in the line of duty, but subject to the approval of the commander of the forces of which said enlisted men form a part. Every company officer of a regiment, commanding any troop, battery, or company not in the field, or commanding in any garrison, fort, post, or barrack, may, in the absence of his field officer, grant furloughs to the enlisted men, for a time not exceeding 20 days in six months, and not to more than two persons to be absent at the same time."

What business has this regulation amongst the Articles of War?

Another class of articles relates to the constitution and proceedings of courts-martial, or, generally, to the administration of justice through the medium of these courts. These are not properly articles of war, or at least form no part of the penal code, and should be grouped separately.

By this process, the military penal code would be made to stand by itself, and would become easier to grasp and handle.

But the Articles of War seem to me to require revision in a more important particular. It has, from time to time, been deemed necessary to engraft new principles upon them, and I believe it would be well were this now carried somewhat further. As it is not the object in this place to discuss the subject in full, I shall refer to but four or five points in illustration.

FIRST: DUTIES OF THE JUDGE-ADVOCATE.

It has now become the recognized right of the accused to be represented by counsel before a court-martial, and, when so represented, the prosecution is apt to be conducted with an amount of interest which must unfit the prosecutor for any other relationship to the court. Yet, under our system, the judge-advocate, besides being the prosecutor for the Government, is the recorder and the legal adviser of the court. These functions are apt to be irreconcilable with that of prosecutor, as is also his relation to the accused. Particularly, I think, should the judge-advocate be excluded from the secret sessions of the court, where the accused is unrepresented; for here he may, by a word, or the inflection of a word, or by a gesture, even unwittingly, influence its judgment—to say nothing of a possible *suppressio veri*, or *expressio falsi*.

The importance of separating these duties is recognized in the English code, which provides that no person acting as prosecutor, or being a witness for the prosecution, shall also act as judge-advocate at a trial. This principle, I think, it would be well for us adopt. It would not prevent officers of the Judge-Advocate-General's Department being assigned as prosecutors.

SECOND: DEPOSITIONS.

In my last annual report I had the honor to invite attention to the subject of deposition evidence, and have had occasion to do so several times since, in submitting the proceedings of certain courts-martial for the consideration of the Secretary of War.

It has become a not uncommon thing to take this evidence before an officer of the Army other than the judge-advocate of the court-martial before which the deposition is to be read. There is no authority of law for such a proceeding.

The 91st Article of War is as follows:

"The depositions of witnesses residing beyond the limits of the State, Territory, or District in which any military court may be ordered to sit, if taken on reasonable notice to the opposite party and duly authenticated, may be read in evidence before such court in cases not capital."

There is no other statutory provision on the subject now in force.

The 74th Article of War (O. S.) provided that on the trial of cases not capital, before courts-martial, the deposition of witnesses not in the line or staff of the Army might be taken before some *justice of the peace*, and read in evidence, &c.

The present 91st article provides, generally, that the deposition shall be *duly authenticated*. This necessarily means that it shall be authenticated by some officer by law vested with the power to do so; that is, by some officer competent to administer oaths in the State, Territory, or District in which the deposition is taken. Otherwise it cannot be said to be *duly authenticated*.

Except in a few cases, officers of the Army are not empowered to administer oaths.

Under the 2d Article of War, an officer can administer an oath of enlistment. Under the 84th, 85th, and 92d articles, an officer can administer an oath in swearing in the members of a court-martial and its judge-advocate, and to a witness giving evidence

before it. Under section 183 of the Revised Statutes of the United States, an officer or clerk of an Executive Department, detailed to investigate frauds on the Government, or any irregularity or misconduct of any officer or agent of the United States, has authority to administer oaths to witnesses attending to testify or depose in the course of such investigation.

But by no statute whatever are officers empowered to administer oaths in the taking of depositions intended to be used in evidence before courts-martial. Nevertheless, it is a power constantly assumed.

The authority is supposed to be derived from paragraph 1752 of the Army Regulations. In my opinion this paragraph is void, for the reason that the vesting an officer with such a power is, in itself, the exercise of a legislative and not an executive power, and that, therefore, an Army regulation is inoperative. But, independently of this consideration, the paragraph referred to was never intended to convey the power claimed under it. The paragraph is as follows:

"Affidavits or depositions may be taken before any officer in the list as follows, when recourse cannot be had to any before named on said list, which fact shall be certified by the officer offering the evidence: 1st, a civil magistrate competent to administer oaths; 2d, a judge-advocate; 3d, the recorder of a garrison or regimental court-martial; 4th, the adjutant of a regiment; 5th, a commissioned officer."

This paragraph is found in the Regulations, under the general title of "Property accountability," and the sub-title of "Responsibility for company clothing, arms, &c," and must be construed in connection with the paragraphs, *in part materia*, in whose company it is found. Thus regarded, it is manifest that it was intended to relate only to the settlement of property accountability, and not to the administration of justice in criminal trials. This was also the opinion of Judge-Advocate-General Holt. (Digest, Opinions of Judge-Advocate-General, edition of 1880, page 347.)

Therefore, deposition evidence, thus taken, is taken without the sanction of a legal oath, and a false statement on a material point would not be perjury.

It is, of course, often extremely expensive to summon witnesses from a distance, and sometimes impossible to have the deposition duly authenticated at the place where the witness resides, because of the absence of any officer competent to administer oaths. It is, therefore, desirable that the commissioned officers of the Army should be vested with this power.

THIRD: TRIAL OF MILITARY CONVICTS BY COURTS-MARTIAL.

I respectfully invite attention to another subject, which I briefly discussed in my last annual report. I refer to the lack of military jurisdiction, for the purpose of trial, over military convicts *who have been discharged from the service*, and are confined elsewhere than at the "Military Prison" at Leavenworth.

Section 1361 of the Revised Statutes of the United States is as follows:

"All prisoners under confinement in said military prisons undergoing sentence of courts-martial shall be liable to trial and punishment by courts-martial under the Rules and Articles of War for offenses committed during the said confinement."

The use of the plural word "prisons" in this section is an error. The original act of March 3, 1873, providing for a military prison, designated Rock Island, Ill., as the place for its establishment, and by act of May 21, 1874, the location was changed to Leavenworth, and this is now the only military prison provided for by statute.

At the Leavenworth prison *only* can convicts who have been discharged the service be brought to trial for offenses committed during their imprisonment. There is no good reason why this provision of law should be restricted to one prison. The same necessity for it exists elsewhere where military convicts are confined; and a provision of law seems to be required, extending the jurisdiction of courts-martial over all such military convicts, wherever confined, for offenses committed during confinement.

FOURTH: THE ONE HUNDRED AND THIRD ARTICLE OF WAR.

Without undertaking to enter the wide field of discussion which this article presents, attention is here only invited to the very conflicting views which have been expressed with reference to it, particularly as regards its application to the offense of desertion. It seems to me to require legislation to set this matter finally at rest.

I have the honor, in addition to the foregoing, to call attention to the remarks made in the last annual report from this office on the subject of "contempts of court."

But without going further into the matter, I feel sure that I am not expressing my opinion alone, when I say that the whole subject of the revision of the Articles of War is of sufficient importance to justify the appointment of a board of military officers for its consideration.

These particular points were dwelt upon simply as illustrations of a general proposition. To go further would perhaps too nearly have ap-

proached the appearance of an effort on the part of this office to submit a revision of its own. This it was desired to avoid, and a reference of the whole subject to a board of military officers was therefore recommended. As to the composition of the board I would, however, here suggest the intermixture of a civilian legal element, to assist in keeping it in uninterrupted view of the ordinary law of the land. The assistance of men learned in the law would be most useful, and would add strength to the conclusions of the board.

There are those—although, I believe, comparatively few—who doubt the advisability of undertaking such a work; fearing, perhaps, that there may be some danger lurking in it, or believing that what has sufficed our wants until now will continue to do so. Yet it is certainly true that no code of laws can be devised suited to all the changing circumstances of a growing nation. The code to which we so tenaciously cling is of English origin, and intended to be adapted to English wants and institutions, which in important respects differ from our own. There certainly can be no reason for adhering to a collection of words on the ground of their antiquity alone. The English themselves have not done so; having, on the contrary, from time to time ingrafted new principles upon their code, thus giving it a new life and satisfying the needs of to-day much better than our own. We have, it is true, made some important additions to our code, but it is very far from being free from fault and beyond improvement.

The revision of the Articles of War is not, however, a work which can be accomplished in a day; and, in the mean time, the administration of military justice is apt to be obstructed for want of legislation. To some of the subjects upon which legislation is desirable I have already referred. I shall briefly invite attention to a few more, touching also upon some of the particulars wherein the English military code seems to be in advance of our own.

SUMMARY PUNISHMENT.

The large number of trials by garrison and regimental courts-martial for the year ending September 30, 1885, attracted the notice of those in authority, and subsequently a bill was introduced into the Senate giving to certain officers the power of summary punishment in certain cases. This, however, failed to become a law.

It may be safely stated that the Army is of one opinion on this subject, and that this power, within certain narrow and well-defined limits, may without danger of abuse be intrusted to commissioned officers. The advisability of such a measure has not, I think, been questioned. The principal question seems to have been as to the person to whom the power should be intrusted. One plan proposed is to vest this power in the second in command at a military post. As to this I am of opinion that it is not sufficiently elastic to meet all cases, inasmuch as the second in command may, in consequence of his relations to the offender, his own personal unfitness, or other reasons, be disqualified for the important trust. But it would not be difficult to devise a system, if the principle can secure recognition. Summary punishment is provided for by the English code, by virtue of which the commanding officer—

may take steps for bringing the offender to a court-martial, or in the case of a soldier may deal with the case summarily.

Where he deals with the case summarily, he may—

(a) Award to the offender imprisonment, with or without hard labor, for any period not exceeding seven days; and

(b) In the case of the offense of drunkenness, may order the offender to pay a fine not exceeding ten shillings, either in addition to or without imprisonment with or without hard labor; and

(c) In addition to or without any other punishment, may order the offender to suffer any deduction from his ordinary pay authorized by this act to be made by the commanding officer.

* * * * *

A constant resort to formal courts for the punishment of trivial derelictions of duty is extremely disheartening and demoralizing to the offender, and, moreover, is sometimes, in the absence of the necessary number of officers at a post, accompanied with serious delay.

Officers differ in their understanding of their relation to enlisted men, as well as in their character for independence. The consequence is that whereas one company commander will bring every case, however insignificant, before a court-martial, another will find a more expeditious way of disposing of trifling lapses from duty, as, for example, by a deprivation of privileges. Such a difference in the treatment of soldiers should not exist; it is not just. For these, as well as other reasons, it is desirable that the power of punishing summarily should to some extent supersede the trial by garrison or regimental courts.

CIVILIAN WITNESSES.

In the present condition of the law, to procure the testimony of a civilian before a court-martial may sometimes be impossible. In an opinion of this office dated August 27, 1885, it was held that, in the absence of legislation to that effect, a court-martial had no power to punish for contempt a civilian who, having been summoned as a witness, and having appeared, refused to testify. An opinion to the same effect was afterwards given by the Department of Justice, and the War Department has accepted these opinions as correct. This, however, leaves the court-martial in a very helpless condition, one which is likely sometimes to lead to an entire failure of justice.

Article 126 of the British Army Act provides as follows:

126. (1) Where any person who is not subject to military law commits any of the following offenses, that is to say:

- (a) On being duly summoned as a witness before a court-martial, and after payment or tender of the reasonable expenses of his attendance, makes default in attending; or
- (b) Being in attendance as a witness—
 - (i) Refuses to take an oath legally required by a court-martial to be taken; or
 - (ii) Refuses to produce any document in his power or control legally required by a court-martial to be produced by him; or
 - (iii) Refuses to answer any question to which a court-martial may legally require an answer.

the president of the court-martial may certify the offense of such person under his hand to any court of law in the part of Her Majesty's dominions where the offense is committed which has power to punish witnesses, if guilty of like offenses in that court, and that court may thereupon inquire into such alleged offense, and after examination of any witnesses that may be produced against or for the person so accused, and after hearing any statement that may be offered in defense, if it seem just, punish such witness in like manner as if he had committed such offense in a proceeding in that court.

In this country there is no appeal from a military to a civil court, and no such proceeding as carrying a contempt of the orders of the former before the latter for punishment. If there were, it would probably not accomplish its object, as our courts-martial often sit at too great distances from any civil courts to make this a practical solution of the dif-

ficulty. It would, in my opinion, therefore, be best to intrust this power to the court-martial itself.

In the articles for the government of the Navy this is provided for; article 42 of that code being as follows:

ART. 42. Whenever any person refuses to give his evidence, or to give it in the manner provided by these articles, or prevaricates, or behaves with contempt to the court, it shall be lawful for the court to imprison him for any time not exceeding two months.

MEASURE OF PUNISHMENT.

The great latitude allowed by our Articles of War in fixing the amount of punishment for military offenses is a noticeable and objectionable feature. By forty-two of the fifty-four articles which constitute the penal code, the punishment is left to the discretion of the court-martial. The consequence is that, owing to the differing composition of such courts as to the age, experience, and characteristics of their members, and of the different convictions maintained by reviewing authorities, similar offenses are often punished with greatly varying degrees of severity; and this again often leads to a subsequent partial equalization of punishment by an exercise of the pardoning power. Punishment is most effective when evenly awarded and rigorously enforced, and it seems to me to be very desirable that, so far as possible, a scale of punishment should be adopted which would reduce the amount of dissimilarity now existing. This dissimilarity is very marked in the case of desertion, but it is not confined to that offense.

As an instance of what is possible under our present system, attention is invited to the following cases, reported in one of the annual reports of the Department of Texas, viz:

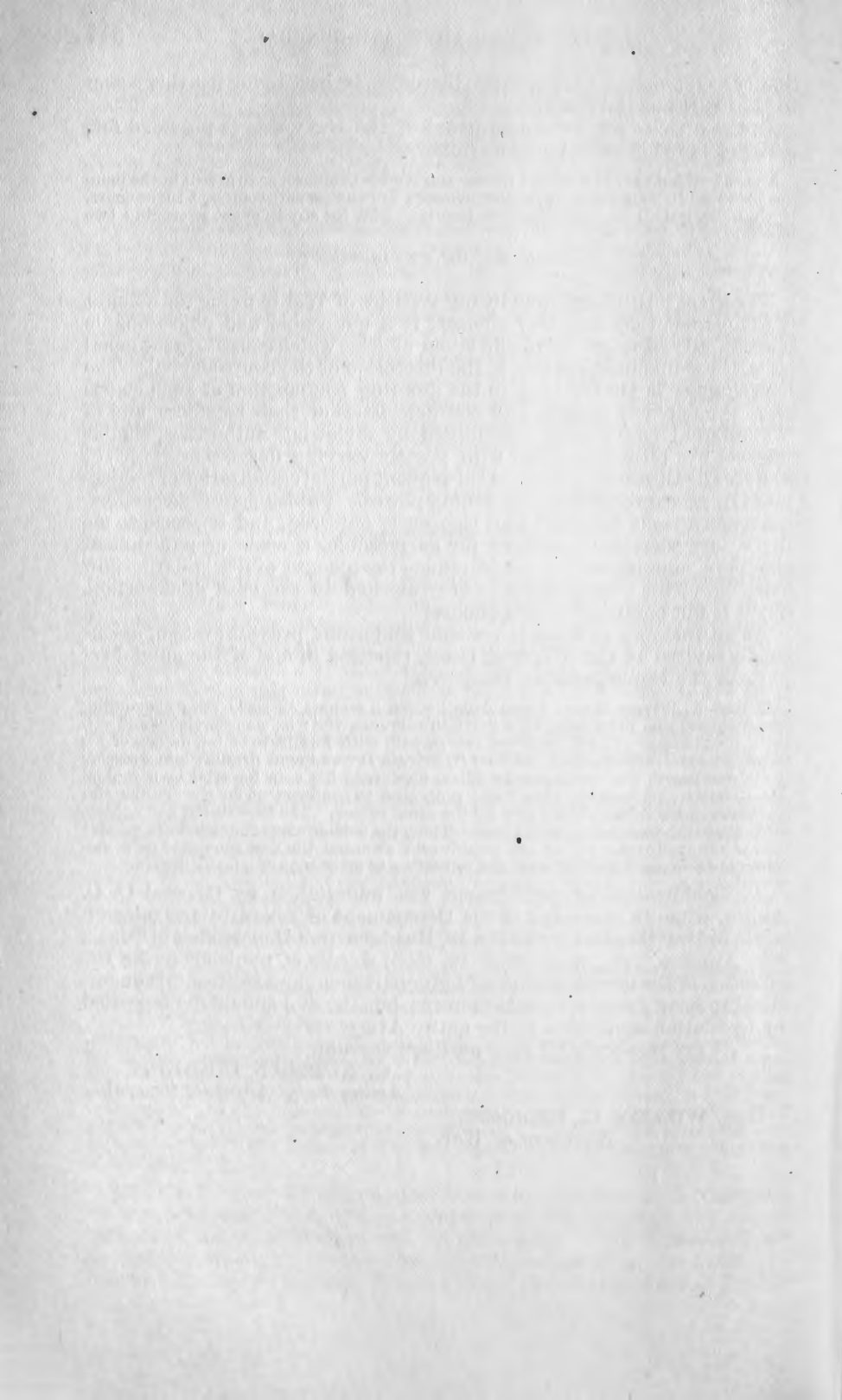
At Fort A, Private B was found drunk while *a sentinel on post*; the commanding officer caused him to be tried by a garrison court-martial; he was convicted and suffered confinement at hard labor for one month, with forfeiture of ten dollars of his pay during the same period. At Fort B, Private D was found drunk while *a member of the post-guard*; the commanding officer forwarded his case for trial by a general court-martial; he was convicted and sentenced to confinement for six months and forfeiture of ten dollars of his pay for the same period. The records did not exhibit any mitigating features in either case. Thus, the soldier who committed the greater offense received one-sixth of the punishment awarded the one convicted of a violation of the same article of war, but consisting of an offense of a lesser degree.

An equalization of punishment was undertaken by General C. C. Augur, when in command of the Department of Texas, by recommending in orders (General Order No. 19, Headquarters Department of Texas, San Antonio, Tex., September 19, 1883) a scale of punishment for the adoption of the courts-martial of his department, and the result is understood to have been very satisfactory; but the evil should be remedied by legislation applicable to the entire Army.

Very respectfully, your obedient servant,

G. NORMAN LIEBER,
Acting Judge-Advocate-General.

Hon. WILLIAM C. ENDICOTT,
Secretary of War.



REPORT OF THE QUARTERMASTER-GENERAL.

REPORT

OF

THE QUARTERMASTER-GENERAL.

QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., October 9, 1886.

SIR: I have the honor to submit the annual report of the operations of the Quartermaster's Department during the fiscal year ending June 30, 1886.

The balance in the Treasury to credit of the Quartermaster's Department at end of June 30, 1885, was, as by last report (including \$48,902.60 pertaining to Signal Service, disbursed by Quartermaster's Department)	\$566,075 09
Appropriations for the fiscal year for the service of the Quartermaster's Department, &c., were as follows: Acts of March 3, 1885, February 2, 1886, and March 26, 1886 (including appropriation of \$184,579.29, pertaining to Signal Service, disbursed by Quartermaster's Department)	9,902,862 48
Amounts deposited to the credit of appropriations and received from sales to officers	526,925 95
Total	10,995,863 52
Remittances to disbursing officers have amounted to	\$9,538,913 43
Requisition to pay settlements made at the Treasury on claims and accounts	562,548 48
Carried to surplus fund (act June 20, 1874)	182,518 40
	10,283,980 31

Leaving balance in Treasury undrawn at end of June 30, 1886 ... 711,883 12

The tables, statements, abstracts, &c., which accompany this report will be found to give the items of appropriations, expenditures, and disbursements in all their details.

DUTIES OF THE QUARTERMASTER'S DEPARTMENT.

Under sections 219 and 220, Revised Statutes, and the authority of the Secretary of War, the Quartermaster's Department transports troops, munitions of war, equipments, military property, and all articles of supply from the places of purchase to the several armies, garrisons, posts, and recruiting places; provides for the safe-keeping of such articles; the distribution, adequate and timely supply of the same to the regimental quartermasters and to such officers as may, by virtue of the Secretary of War's regulations, be intrusted with the same; and the officers of this Department pay for store-rent and storage necessary for keeping such supplies.

By section 1133 it is further made the duty of the officers of the Quartermaster's Department, under the direction of the Secretary of War, to purchase and distribute to the Army all military stores and supplies requisite for its use which other corps are not directed by law to provide, to furnish means of transportation for the Army, its military stores and supplies, and to provide for and pay all incidental expenses of the military service which other corps are not directed to provide for and pay.

Section 1139 provides that the Quartermaster-General, under the direction of the Secretary of War, shall prescribe and enforce a system of accountability for all quartermaster's supplies furnished to the Army, or to officers, seamen, and marines.

Again, by section 2 of the act of Congress approved July 4, 1864, it is made the duty of the Quartermaster-General to investigate and adjust all claims of loyal citizens in States not in rebellion, in words as follows:

And be it further enacted, That all claims of loyal citizens in States not in rebellion for quartermaster's stores actually furnished to the Army of the United States, and receipted for by the proper officer receiving the same, or which may have been taken by such officers without giving such receipt, may be submitted to the Quartermaster-General of the United States, accompanied with such proof as each claimant can present of the facts in his case; and it shall be the duty of the Quartermaster-General to cause such claim to be examined, and, if convinced that it is just, and of the loyalty of the claimant, and that the stores have been actually received or taken for the use of and used by said Army, then to report each case to the Third Auditor of the Treasury, with a recommendation for settlement.

By acts approved June 18, 1866, and July 28, 1866, the provisions of this act were extended to include the counties of Berkeley and Jefferson, West Virginia, and the loyal citizens of the State of Tennessee.

It is provided by acts of Congress and the regulations founded thereon that the Quartermaster's Department shall secure grounds for national cemeteries, to preserve from desecration the graves of all soldiers who fell in battle, died of disease in the field or hospital in the rebellion; to secure suitable burial places in a national cemetery, free of cost, for all honorably discharged soldiers, sailors, or marines who served during the late war, either in the regular or volunteer forces, dying subsequent to the passage of this act (approved March 3, 1873).

Provision is also made by law for the Quartermaster's Department to furnish suitable head-stones to mark the graves of all soldiers, sailors, or marines who served during the late war whose burial is provided for as above, or who may have been buried in private cemeteries.

By act approved August 4, 1886, further provision is made for continuing the work of furnishing head-stones for unmarked graves of Union soldiers, sailors, and marines in national, private, city, town, and village cemeteries, naval cemeteries at navy yards and stations of the United States, and other burial places.

Under these several acts above recited, and others of like import, the Quartermaster's Department provides the means of transportation by land and water for troops and materials of war for the Army. It also, under the law for arming the militia, provides the means of transportation for ordnance and ordnance stores issued by the United States to the several States and Territories. It transports the property for other Executive Departments on proper requisition, payment therefor being made by the respective Departments to the carriers upon accounts forwarded through the Quartermaster-General's Office for that purpose. It provides wagons, ambulances, carts, saddles, and horse

equipments (except for the cavalry) and harness (except that used by the artillery).

This Department provides vessels for water transportation, builds wharves, constructs and repairs roads for military purposes, pays tolls, and builds all necessary military bridges. It provides and distributes clothing, tents, and equipage, fuel, forage, stationery, lumber, straw for bedding for men and animals, and all materials for camps and for shelter of troops and stores, furniture for barracks, such as bunks, benches, chairs, tables, and lockers, heating and cooking stoves for use in public barracks and quarters, tools for mechanics and laborers in the Quartermaster's Department, and lights for all military posts and buildings.

It builds barracks, quarters, storehouses and hospitals; provides, by hire or purchase, grounds for military encampments and buildings; supplies periodicals and newspapers, or school books in lieu of periodicals, if desired, to the post libraries for the use of enlisted men.

Under provision of act of Congress approved July 5, 1884, the Quartermaster's Department, under the authority of the Secretary of War, contracts for all horses for artillery, cavalry, mounted infantry, and scouts, but in number not to exceed the enlisted men in service required to be mounted.

Under the same act this Department, under the Secretary of War, prepares plans and contracts for the construction of all buildings at military posts.

Under the provisions of section 219, Revised Statutes, "other officers" than "regimental quartermasters," to the average number of 142 have been detailed in the Quartermaster's Department, in doing its duties in various ways in the care and "distribution of the stores of the Quartermaster's Department, under the Secretary of War and his regulations."

INSPECTION BRANCH.

The inspection branch is in charge of Lieut. Col. J. G. Chandler, deputy quartermaster-general, U. S. Army.

This branch of the office conducts the correspondence and keeps the records relating to the assignment to duty of officers of the Quartermaster's Department and of the officers doing duty therein; also the correspondence relating to them individually, as well as to all clerks, agents, and other employes of the Department; it briefs, enters, examines, and acts upon the annual reports rendered by officers of the Department; receives, enters, and files the personal reports pertaining to the stations and duties of the officers of the Department, and of acting assistant quartermaster's; keeps the station book, and prepares the roster of officers of the Quartermaster's Department, issued monthly, and also prepares the monthly returns of officers for the Adjutant-General's Office, as required under paragraph 722, Army Regulations.

It receives and distributes orders circulars, books, pamphlets, etc., necessary to enable officers of the Quartermaster's Department to discharge their duties.

One hundred and forty thousand one hundred and seventy-three orders, &c., were received during the year, and one hundred and eleven thousand six hundred and ninety-two distributed.

It also keeps a book of decisions affecting the Quartermaster's Department, and also a historical register of all clerks, messengers, and others employed in the office of the Quartermaster-General, with record

of time lost, and prepares the semimonthly and monthly pay-rolls of all such employés.

The report of this branch shows the existing organization of the Quartermaster's Department in detail and the duties upon which the officers have been engaged during the past fiscal year.

This branch also receives all applications for appointment to the position of post quartermaster-sergeant, United States Army, as provided by act of Congress, approved July 5, 1884, and conducts all correspondence relating thereto.

Since the last annual report (June 30, 1885), several vacancies have occurred among the post quartermaster-sergeants, by reason of death, &c. These vacancies have been filled, and other appointments made in accordance with the provisions of General Order No. 89, A. G. O., 1884, and No. 2, A. G. O., 1885, so that the number (80) as authorized by law are now in the service.

The post quartermaster-sergeants have been assigned to duty in the several military departments where their services appeared to be most needed, and from reports received at this office their services have been satisfactory and valuable to the Department.

BARRACKS AND QUARTERS.

This branch is in charge of Lieut. Col. J. G. Chandler, deputy quartermaster-general, U. S. A.

During the year the construction of one hundred and ten new buildings at military posts was authorized. These buildings consisted of barracks, officers' quarters, stables, store-houses, guard-houses, shops, &c., and were erected in the States of Nebraska, Texas, California, Louisiana, Michigan, New York, Maine, Maryland, Virginia, Arkansas, Alabama, and in the Territories of Wyoming, Idaho, Utah, Dakota, Indian, Colorado, Washington, and Arizona, at an estimated cost of \$211,120.

The cost of repairs made at the various posts, including labor, tools, and materials, was \$199,096.

For repairs and improvements at recruiting depots, general depots of Quartermaster's Department, and independent stations, there was authorized \$85,934.

From the appropriation of Congress of \$200,000, act approved July 7, 1884, the Secretary of War, on August 7, 1884, granted \$100,000 for the rebuilding of Fort D. A. Russell, Wyoming.

Congress further provided in the sundry civil bill, approved March 3, 1885, \$165,000 for the construction of buildings and the enlargement of such military posts as in the judgment of the Secretary of War may be necessary, \$15,000 of which sum may be used for the purchase of a site near Atlanta, Ga.

This made the sum of \$265,000 available for this fiscal year, from which the Secretary of War made the following distribution :

For San Antonio Barracks.....	\$75,000
For Fort Riley.....	30,000
For Fort Niobrara.....	30,000
For Fort Niagara.....	20,000
For Presidio Barracks.....	20,000
For Atlanta.....	75,000
For Atlanta, land.....	15,000
Total.....	265,006

The Department of Justice having rendered a favorable opinion regarding title to site for new post, at Atlanta, Ga., the full amount of purchase money (\$15,000), as appropriated by Congress, was paid therefor. The Secretary of War having decided that the buildings to be erected should be of brick, the work thereon is now in progress under contract.

The act of Congress, approved February 2, 1886, provided \$250,000 for the purchase of the old Produce Exchange building and site, New York City, for Army purposes, and the sum of \$200,000 for the alteration and remodeling of the building so as to make it suitable for Government use.

Favorable opinions having been given by the Department of Justice as to title, the full amount of the purchase money was paid and the work on the new building, duly contracted for, is now being pushed forward with vigor under the direction of the depot quartermaster, New York City.

For improving the water supply at military posts; for drainage, sewer, wharf, bridge, roads, and other improvements the sum of \$104,560 was authorized.

By act of Congress approved March 3, 1885, the sum of \$100,000 was appropriated for construction and repair of hospitals.

The sum of \$99,454 was authorized for this purpose during the year.

SITE AT FORT BROWN, TEXAS.

Congress, in sundry civil bill approved March 3, 1875, appropriated \$25,000 for purchase of a site at Fort Brown, Texas, and further by act March 3, 1885, granted \$160,000 to enable the Secretary of War to acquire good and valid title to the reservation and to pay and extinguish all claims, &c., and provides that no part of said \$160,000 shall be paid until a complete title is vested in the United States.

No portion of the money has been expended. It is still in the Treasury, the Department having thus far failed to obtain a good and sufficient title.

PROPERTY TRANSFERRED.

Under act of Congress approved July 31, 1882, to provide additional industrial training schools for Indian youths and authorizing the use of unoccupied military barracks for such purposes, 23 buildings at Fort Lapwai, Indian Territory were so transferred to the Interior Department.

POST CEMETERIES.

The remains of a number of soldiers have been transferred from the various military posts to other cemeteries.

Fence and head-board improvements have been made at Forts Reno, Sill, Boise, and McHenry, and a vault provided at David's Island, New York Harbor for deposit of remains awaiting transit to Cypress Hill Cemetery.

RESERVATIONS.

The President of the United States, on July 30, 1885, modified the limits of Fort Sully; and on December 30, 1885, Fort Reno, Indian Territory, timber reservation was declared by him.

On May 15, 1886, the boundaries at Fort Lowell, Arizona, were enlarged in order to secure a good water supply.

TRANSFERS.

Fort Cameron; winter pasturage reservation at Fort Cœur d'Alene; Fort Klamath, Oregon; old powder-house lot at Fort Saint Augustine, Florida, and certain parts of Fort Hays reservation, were transferred to the Interior Department during the fiscal year.

FIRES.

The losses by fire reported during the fiscal year have been as follows: Laundresses' quarters at Plattsburg Barracks, New York; shops at Fort Lewis, Colorado; tools at West Point, New York; shops at Fort Elliott, Texas; officers' quarters at Fort Ellis, Montana; barracks and stable at Fort Custer, Montana; barracks at Uncompahgre, Colorado; stable at Fort Leavenworth, Kansas; barracks and hospital at Columbus Barracks; saw-mill &c., at Fort Wingate, New Mexico; machinery at Fort Apache, Arizona.

DAMAGE BY FLOOD.

By each large rise or flood of the Ohio River the buildings and grounds at Newport Barracks, Kentucky, are partly submerged.

It is therefore recommended that steps be taken toward the purchase of higher land in that vicinity, and that the building of proper quarters for troops thereon be provided for by Congress.

TRANSPORTATION.

This branch is in charge of Lieut. Col. C. G. Sawtelle, deputy quartermaster-general, U. S. A.

The sum of \$2,900,000 was appropriated for transportation of the Army in the act approved March 3, 1885 (24 Stat., 359), making appropriations for the support of the Army for the fiscal year ending June 30, 1886.

Transportation was provided by the Quartermaster's Department during the year by rail, water, wagon, and stage for 236,180 persons (including 200,662 persons transported or ferried by Government vessels), 160,191.63 tons of freight, and 7,907 horses and mules, costing, as reported, \$1,579,453.58, of which \$266,401.38 has been paid for the transportation of persons, and \$975,793.93 for the transportation of live-stock and freight, leaving \$337,258.27 due on outstanding accounts at the close of fiscal year.

In addition to the foregoing, the total cost incurred for tolls, payment of employes, enlisted men on extra duty, purchasing, maintaining and operating vessels, purchase of draft animals, purchase and repair of harness, for water-supply, sewerage, construction and repair of wharves and bridges, &c., amounted to \$1,501,125.58, which makes the entire cost of the service under Army transportation \$3,080,579.16, of which \$458,836.74 remained unpaid at the close of the fiscal year.

MOVEMENT OF TROOPS.

The larger movements of troops were as follows:

Second Cavalry: Two companies from Department of California to Department of Arizona; three companies from Department of Texas to Department of the Missouri.

Sixth Infantry : Headquarters from Department of the Platte to Department of the Missouri.

Eighth Infantry : Seven companies from Department of California to Department of Arizona.

The exchange of stations of the First and Eighth and the Second and Fourth Infantry was deferred by order of the Secretary of War until after the close of the fiscal year, for lack of funds.

RAILWAY SERVICE.

Transportation was supplied by rail by the Department for 28,917 persons, 7,466 animals, and 71,626 tons of material, at a cost (1) by payments out of the appropriation transportation of the Army, \$940,494.40, of which \$212,412.64 is for transportation of persons, \$456,556.20 for transportation of live stock and freight, and \$271,525.56 for payment of outstanding accounts; (2) by credit in the Treasury on account of indebtedness of bonded Pacific railroads, \$488,761.06, of which \$153,830.34 was for transportation of persons, and \$334,930.72 for transportation of live-stock and freight; (3) by payment of land-grant railroads out of special appropriation for the purpose, the sum of \$125,000.

Total cost to the United States for railroad transportation furnished by the Quartermaster's Department during the year was \$1,554,255.46.

BONDED PACIFIC RAILROADS.

The accounts of the bonded Pacific railroads are adjusted under the following statutes : act March 3, 1873, act May 7, 1878, act March 3, 1879.

Settlements for service on the unsubsidized portions of the Union Pacific Railway, including the Kansas Division (formerly the Kansas Pacific), and the Denver Pacific Railroad and Telegraph Company; the Central Branch Union Pacific Railroad, and the Sioux City and Pacific Railroad, continue to be made the same as during the past fiscal year.

Settlements for services over the unsubsidized portions of the Central Pacific Railroad have heretofore been held subject to the provisions of Treasury circular letter dated January 12, 1884, under which the amounts were certified by the accounting officers and reported to the Secretary of the Treasury, subject to the disposition of Congress.

No action having been taken by Congress in reference to the disposition of the amounts embraced in the settlements held in abeyance, a motion was made by the company before the accounting officers of the Treasury by which, in effect, the revocation of the order of January 12, 1884, and the revival of the enforcement of that of June 27, 1883, was requested.

The Second Comptroller, in a decision thereon, dated August 28, 1885, which was approved by the Secretary of the Treasury, and published in Treasury circular No. 136, dated September 11, 1885, directs the revocation of Department circular No. 83, of June 27, 1883, and circular letter of January 12, 1884, and that all compensation now due or which may hereafter become due the Central Pacific Railroad for services rendered the Government be withheld, and applied, one-half upon interest account and the other half credited to the sinking fund, as required by the act of May 7, 1878; also, that hereafter the accounts of the company be adjusted by the accounting officers, the Secretary of the Treasury retaining the whole amount, applying the same in the manner as provided by that act.

It is understood that, on application of the company, the Secretary of the Treasury consented to suspend action under that part of his order directing the withholdment and application of compensation due or to become due the company, upon the condition that the matter in issue be presented to the proper courts for judicial decision. In conformity thereto a petition of the Central Pacific Railroad against the United States, No. 14,711, was filed in the United States Court of Claims, November 24, 1885, to recover compensation for services performed for the United States in transportation over those portions of the road as above mentioned, in the building of which it had not been aided by the Government, and therefore not embraced in the above-named act.

The United States demurred on the ground that the whole of said compensation is required to be retained under the provisions of the second section of the act, May 7, 1878, chapter 96, Thurman act, 20 Statutes, page 58.

The decision of the court was that the provisions of the act applied only to services over the aided portions of the road, and the demurrer was overruled.

An appeal was taken to the Supreme Court of the United States (October term, 1885), and decision rendered May 10, 1886, sustaining the railroad company in its construction of the second section of act of May 7, 1878, that cash payment for services over the unsubsidized roads should be made by the United States.

The Secretary of the Treasury, in circular of June 4, 1886, invited attention to decision referred to, and directed that thereafter the accounts and claims of the company for such services shall be settled, adjusted, and paid in conformity to such decision, and that all Department circulars heretofore issued upon the subject are modified accordingly.

On the suggestion of the honorable the Secretary of the Treasury, and by direction of the honorable the Secretary of War, the Quartermaster-General, on June 7, 1886, submitted the estimates of appropriations required to execute the decision of the Supreme Court, aggregating \$906,314.42. (See House Ex. Doc. 270, Forty-ninth Congress, first session.)

The appropriation was, however, refused by Congress. (See House Report No. 3109, Forty-ninth Congress, first session.)

In view of the circumstances here reported, and the fact that the estimates upon which the regular appropriations of the Quartermaster's Department entitled "Transportation of the Army" were based, carefully excluded any provision for payment of money to the bonded Pacific railroads, for the reason that the laws as interpreted by the accounting officers of the Treasury and the Department of Justice, at the time of the preparation of the estimates, prohibited any payment to these companies, it is thought that the Army transportation appropriation should not be used in payment of any accounts of these companies, but that a special appropriation from Congress for the purpose should be secured.

As a matter of fact, the appropriation for transportation of the Army will be hardly sufficient to meet the usual demands of the service, as contemplated in the preparation of the estimates of the amount needed for the purpose.

INDEBTED RAILROADS.

There are four railroads indebted to the United States for railway material purchased under executive order at the close of the war, viz,

the Edgefield and Kentucky, the McMinnville and Manchester, the Mobile and Ohio, and the Memphis, Clarksville and Louisville Railroads.

As stated in my last annual report, these roads are apparently delinquent in the settlement of their indebtedness, and some action by Congress appears to be necessary to either relieve the debtors or provide some method of procedure for the collection of the same.

WATER TRANSPORTATION.

During the fiscal year there were moved by water transportation 2,210 persons, 345 animals, and 18,864,350 pounds of material, not including 200,662 persons and 10,892,887 pounds of freight transported or ferried on United States vessels controlled or operated by the Quartermaster's Department. The aggregate cost of this service was \$159,369.26.

The total cost of repairing, running, and maintaining the vessels owned by this Department, including the wages of the crews during the fiscal year, as reported to this office, is \$85,206.64, less than last year by \$24,004.68.

According to reports received from officers of the Quartermaster's Department there have been 19 vessels of different kinds employed at various times during the year at an expense of \$29,502.05.

WAGON TRANSPORTATION.

By wagon carriage the Department transported, as reported, 147,364,736 pounds of military supplies during the year at a cost to the appropriation "Transportation of the Army" of \$496,930.47. The sum of \$49,528.79 was still due on outstanding accounts June 30, 1886. Eighty-one contracts for wagon transportation were filed during the year.

STAGE TRANSPORTATION.

Four thousand three hundred and ninety-one persons and 9,180 pounds of stores and extra baggage were transported by stage during the year, at a cost of \$51,461.24. Of this sum, \$6,722.81 was due on outstanding accounts June 30, 1886.

The Department has been constrained during the year to make unusual and extraordinary expenditures from the appropriation, among which the following are mentioned:

The increased transportation expenses in the Department of Arizona and the District of New Mexico, owing to Indian troubles in that section, an excess of \$118,285.60 over the preceding fiscal year; the large amounts paid for transportation of horses and for the purchase and transportation of mules caused by the Indian troubles; the replacement of stock worn out in the Oklahoma operations and other movements on the border during the preceding fiscal year; and the necessary construction of a steam-propeller for service in San Francisco Harbor, to take the place of the worn-out steamer General McPherson, which has been in service twenty years.

The strictest economy in transportation expenditures has been enjoined and required of all officers of the Department during the year, to the extent of denying many seeming necessities of the service and deferring desirable movements of troops.

Of the \$125,000 appropriated for payment from Army transportation over certain land-grant railroads during the fiscal year, the sum of \$48,395.54 was paid out on settlements of the accounting officers of the

Treasury, leaving a balance of \$76,604.46 to pay outstanding claims. The additional sum of \$63,942.50 was also paid from similar appropriations of previous fiscal years, making a total of \$112,338.04 paid for such services during the fiscal year.

TRANSPORTATION ACCOUNTS AND CLAIMS.

Three thousand one hundred and eighty transportation accounts and claims, amounting to \$1,163,786.27, received action during the year; of these, 3,148, amounting to \$1,154,173.72, were referred to the proper bureau or office for settlement; sixteen, amounting to \$3,206.26, were unfavorably reported upon and rejection recommended; and sixteen, amounting to \$6,409.29, were suspended for additional evidence. Fifty-two, amounting to \$7,167.72, were, at the close of the year, awaiting action.

REGULAR AND MISCELLANEOUS SUPPLIES.

ANIMALS.

Twelve hundred and fifty-one cavalry and artillery horses were procured by purchase during the fiscal year, costing \$176,667.65, an average cost of \$141.24 per head.

For the Army trains and special service 18 draught-horses were purchased at an average cost of \$205.85 per head, and 563 mules at an average cost of \$154.99 per head.

The sale of 780 cavalry and artillery horses, 28 draught-horses, and 329 mules is reported for the sum of \$51,006.82, all of which was deposited in the Treasury to the credit of miscellaneous receipts, excepting such small sums as were received for sales to officers.

There were 227 cavalry and artillery horses, 8 team-horses, and 300 mules lost, stolen, and died during the fiscal year, leaving on hand on the 30th June, 1886, 8,609 cavalry and artillery horses, 454 team-horses, 5,493 mules, and 6 oxen.

WAGONS AND AMBULANCES.

During the fiscal year there were purchased 100 six-mule army wagons at a cost of \$7,500, and 9 bodies for two or four horse or mule wagons at a cost of \$168.75.

VETERINARY SUPPLIES.

During the fiscal year veterinary supplies were purchased from the Medical Department to the value of \$2,266.95, against the cost of \$13,332.28 for similar supplies for the fiscal year 1884-'85, and \$9,072.28 for the fiscal year 1883-'84.

This saving has been effected by the operation of General Orders No. 64, A. G. O., 1884, which greatly reduced the number and quality of veterinary supplies for Army uses. This revised list has been found to be sufficient to meet the needs of the service.

ILLUMINATING SUPPLIES.

During the fiscal year there were purchased 417 pendant lamps, 802 bracket lamps, 51 street lamps, 1,853 lanterns (oil and candle combined), and the necessary chimneys, wicks, and various extra parts, at a cost of \$13,925.33.

Seven hundred and sixty gallons of gasoline were purchased at a cost of \$497.20, and also 319,990 gallons of mineral oil, in 5-gallon cans, at a cost of \$49,470.51, making the aggregate expenditure on account of illuminating supplies \$63,893.04; less than the cost last year by \$5,723.91.

MISCELLANEOUS CLAIMS AND ACCOUNTS.

One thousand five hundred and fifty-two miscellaneous claims and accounts, amounting to \$532,160.85, received action during the year, and 10,669 claims and 249 accounts, amounting in the aggregate to \$8,516,715.59, remain on file awaiting action.

CLAIMS UNDER ACT OF JULY 4, 1864.

This branch is in charge of Lieut. Col. B. C. Card, deputy quartermaster-general, U. S. A.

The work on these claims was continued throughout the past fiscal year, but as the work in the field nears completion the investigation becomes more difficult. Good progress has however, been made, and it is now believed that with the force provided the investigations of these claims in the field can be completed by the end of the current fiscal year.

There were investigated and reported upon by agents during the past fiscal year 2,906 claims, calling for \$1,816,751.02.

Final action was taken on 3,767 claims, amounting to \$1,155,816.36, 1,316 of which the sum of \$235,243.32 was allowed, and \$403,382.32 disallowed, and 2,451 entirely rejected, amounting to \$517,190.72.

Also, in compliance with acts of January 20, 1885, and February 13, 1885, respectively, two claims of a special character, in favor of Elizabeth Corson and Ayers P. Merrill, deceased, and amounting to \$103,998.45, were investigated and reports made thereon for the consideration of Congress.

The following statement shows the number and amount of claims presented under act of July 4, 1864, and action taken thereon:

Number of claims presented to June 30, 1886.....	57, 821
Number of claims allowed to June 30, 1886.....	18, 329
Number of claims disallowed to June 30, 1886.....	34, 509
	<hr/>
	52, 838
Number on hand July 1, 1886.....	4, 983
	<hr/>
Amount of 57,821 claims presented.....	\$39, 811, 886 99
Amount of 52,838 claims acted upon.....	35, 195, 309 04
	<hr/>
Claims remaining on hand (4,983).....	4, 616, 577 95

CLOTHING AND EQUIPAGE SUPPLIES.

This branch is in charge of Capt. John F. Rodgers, military storekeeper, U. S. A.

All the clothing and equipage for the Army are procured through this branch of the office.

The clothing and equipage are contracted for or manufactured at the general depots of this Department at Philadelphia, Jeffersonville, and San Francisco. The boots and shoes are manufactured at the Military Prison at Fort Leavenworth, Kansas.

The amount appropriated by Congress was \$1,250,000. Credits amounting to \$73,982.69 were added on account of sales to officers and on account of clothing overdrawn by enlisted men; \$1,323,664.23 were remitted to officers of the Department during the fiscal year to defray duly authorized expenditures, leaving a balance of \$318.46 in the Treasury, which together with such amounts as may still be placed to the credit of the appropriation will all ultimately remain in the Treasury, as the outstanding obligations are few, involving only small sums.

During the fiscal year \$63,398.85 were realized at the general depots at Philadelphia, Pa.; Jeffersonville, Ind.; Saint Louis, Mo., and San Francisco, Cal., and at the Military Prison at Fort Leavenworth, Kansas, from sales of old pattern and unserviceable clothing and equipage, materials, cuttings, &c., which amount, as required by law, has been covered into the Treasury, credited to "Miscellaneous receipts."

The principal issues from the general depots during the year were 6,602 helmets, 6,806 cork helmets, 43,299 forage caps, 12,194 fur and canvas caps, 20,818 campaign hats, 8,668 overcoats, 1,076 fur and blanket-lined overcoats, 11,477 uniform dress coats, 45,417 blouses, 24,036 canvas fatigue coats, 3,698 stable frocks, 3,227 pairs overalls, 70,278 pairs trousers (kersey), 24,304 pairs trousers (canvas fatigue), 1,386 pairs trousers (linen), 12,507 pairs suspenders, 44,497 flannel shirts, 62,508 knit undershirts, 75,114 pairs drawers, 150,053 pairs woolen stockings, 142,673 pairs cotton stockings, 26,102 pairs boots (all kinds), 80,477 pairs shoes (all kinds), 154,969 pairs Berlin gloves, 12,514 pairs woolen mittens, 7,771 pairs fur mittens and gauntlets, 11,947 pairs canvas mittens, 13,293 pairs leather gauntlets, 6,570 pairs Arctic overshoes, 16,017 woolen blankets, 24,745 pairs gold lace chevrons, 10,018 pairs cloth chevrons, 10,034 barrack bags, 14,320 wire woven bunk-bottoms, 17,704 mattresses, 36,618 mattress covers, 18,252 pillows, 33,636 pillow-cases, 71,001 bed-sheets, 5,515 mosquito-bars, 6,031 axes, 1,923 shovels, 3,074 tents (miscellaneous), 11,272 tents (shelter), 15,589 scrubbing-brushes, 28,945 corn brooms, 3,380 barrack chairs.

The principal manufactures were 12,035 canvas caps, 5,951 overcoats, 803 overcoats (blanket-lined), 4,979 uniform dress coats, 39,046 blouses, 14,997 canvas fatigue coats, 2,281 stable frocks, 4,010 pairs overalls, 61,423 pairs trousers, 13,904 pairs canvas fatigue trousers, 21,958 dark blue flannel shirts, 92,067 pairs drawers, 11,925 pairs canvas mittens, 29,727 pairs gold lace chevrons, 12,179 pairs cloth chevrons, 12,633 barrack bags, 24,624 mattress covers, 2,826 tents (all kinds).

The following boots and shoes were manufactured at the Military Prison at Fort Leavenworth, Kansas, during the fiscal year: 6,997 pairs boots, brass-screwed, old pattern; 2,143 pairs cavalry boots, brass-screwed; 12,604 pairs cavalry boots, sewed; 12 pairs shoes, brass-screwed, old pattern; 1 pair post shoes, brass-screwed; 26,778 pairs post shoes, sewed; 93 pairs field shoes, sewed; 30,981 pairs campaign shoes, sewed; 5,221 pairs campaign shoes, brass-screwed; 3,000 barrack chairs; 27,258 corn brooms.

The supplies procured appear to have given satisfaction, and have been up to the existing standards and specifications. A full compliance therewith is insisted upon, with favorable results. But few complaints have been received during the year in regard to the clothing issued.

Reports from the Army represent the enlisted men as contented and satisfied, the quality of the clothing being good and the allowance provided ample.

The pattern of boots and shoes not having given entire satisfaction a further effort has been made to improve the foot gear of the enlisted

men. Lasts, known to the trade as the "Waukenphast," have been procured, and all boots and shoes are now made upon them, and it is thought will prove satisfactory as they shall have been fully introduced.

NATIONAL CEMETERIES.

In charge of Lieut. Col. R. N. Batchelder, deputy quartermaster-general, U. S. A.

There were 82 national cemeteries at the close of the last fiscal year, and the number remains the same.

Four superintendents were appointed during the year and 2 discharged, leaving 73, the number allowed by law, in service June 30, 1886.

The work under contracts of S. G. Bridges and D. W. Whitney, for furnishing headstones for soldiers' graves in private, village, and city cemeteries, has been closed, and final accounts therewith submitted to the Treasury for settlement.

The appropriation for this work having been exhausted, and, as no new appropriation was made therefor, the Department has been unable to supply those headstones for which applications were received during the year. In the appropriation for the present year, however, provision is made for continuing the supply of these stones, and proposals have been invited for furnishing such as may be required to June 30, 1887.

Of the appropriation for construction of a macadamized road to the Springfield, Mo., National Cemetery there is an unexpended balance of about \$4,000, which will be applied in adding covering of gravel and in repairs made necessary by damage to the work by flood.

At the last session of Congress provision was made for the construction of roadways to the Chalmette, Knoxville, and Natchez National Cemeteries, and steps are now being taken preliminary to making contracts for the work. Exclusive of these three there are now six of these roads which have been constructed by special authority of Congress, but as no appropriation has been made for their maintenance, some of them have been greatly injured, and, in some instances, rendered almost useless for want of occasional repairs.

The case of the Vicksburg Cemetery roadway may be cited as an instance where a few hundred dollars expended from time to time when needed would have preserved the road and kept it in good order, but it will now require a special appropriation of \$10,000 to restore the work.

An item has accordingly been included in the estimates for the ensuing fiscal year to provide for the maintenance and repair of these roads, and the subject is here brought to the attention of the Secretary of War in the hope that, as a measure of economy, he will commend it to the attention of Congress.

The work of improvements at the San Francisco National Cemetery has been continued during the year.

At the Cypress Hill Cemetery the inclosing wall on west and north sides has been completed and a macadamized avenue constructed extending from entrance through the entire grounds.

Many necessary improvements have been made at cemeteries not mentioned herein, which are fully set forth in the report of the officer specially in charge of affairs relating to national cemeteries, and in the detailed statement herewith submitted, showing the expenditures on account of each cemetery.

With the appropriation of \$4,000 for a monument at Baxter Springs, Kansas, a handsome structure, with statue of a soldier, has been erected.

There has been a manifest improvement during the past year in the working of the personal force of this office, but many changes are still necessary in order to make the office entirely efficient, especially in the administrative examination of officers' accounts under the system of accountability established by section 1139 Revised Statutes. Any system of accountability which may be devised will fail unless the examination of officers' accounts under it, can be promptly made and the result reached without delay. Such result is necessary for the safety of the officer himself, as timely advice enables him to correct his accounts by securing the necessary evidence, while it is practicable; irregularities can be speedily corrected and new decisions, rulings, and instructions can be made operative and efficient.

To reach the highest efficiency as thus indicated, there are needed a larger number of clerks, competent to examine and pass upon officers' accounts as they are rendered. The office is weak in this special feature, having a large number of very worthy clerks and copyists who are not fitted for this higher class of work. The complicated and difficult accounts, connected with land-grant railways, make a large draft upon the best talent of the office, with the necessary result of diminishing the number of those available to examine and analyze accounts. The work of examining claims is gradually drawing to a close; it is hoped that some of the most valuable clerks employed upon them may be retained for the current work of the office, as already indicated.

It is my duty, as it is a pleasure, to testify to the patient industry and good services generally rendered by all the employés of this office, with a few marked exceptions of those hindered by physical infirmity or failing mental and moral vigor. The shortcomings of even one person invariably adds a greater burden to the competent, the ready, and the willing, and so, more or less, impairs the efficiency of the others.

It is gratifying to hear from all parts of the military service that the officers of the Quartermaster's Department and those doing duty therein were never more zealous or efficient than at the present time, and to them and to those with whom I am brought more immediately in contact are due my grateful acknowledgments for most valuable assistance and support.

S. B. HOLABIRD,

Quartermaster-General, U. S. Army.

Hon. WM. C. ENDICOTT,
Secretary of War.

List of papers accompanying the annual report of the Quartermaster-General for the fiscal year ending June 30, 1886.

1. Report of Lieut. Col. J. G. Chandler, deputy quartermaster-general, U. S. Army, of the operations of the inspection branch of the Quartermaster-General's Office during the fiscal year ending June 30, 1886.

2. Report of Lieut. Col. J. G. Chandler, deputy quartermaster-general, U. S. Army, of the operations of the finance branch of the Quartermaster-General's Office during the fiscal year ending June 30, 1886.

3. Report of Lieut. Col. J. G. Chandler, deputy quartermaster-general, U. S. Army, of the operations of the money and property accounts branch of the Quartermaster-General's Office during the fiscal year ending June 30, 1886.

A.—Statement showing in detail amounts expended from the various appropriations made for the Quartermaster's Department, general depots, and independent posts of the Army, as shown by the accounts of officers from July 1, 1885, to August, 1886, not including appropriation for Army transportation.

A, supplemental.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department for the fiscal year 1885, in the divisions, departments, and general depots of the Army, as shown by the accounts of officers from October 1, 1885, to June 30, 1886, and not heretofore reported.

B.—Statement showing number of civilian employes employed by the month and paid by the Quartermaster's Department in the divisions, departments, general depots, independent posts, and recruiting depots of the Army, on what duty employed, their grade and monthly pay, and the appropriations from which paid, as reported by officers of the Department on their report of persons and articles hired for June, 1886.

C.—Statement showing number of money accounts and returns of quartermasters' stores on hand, received and examined, and statement showing amounts expended by officers of the Quartermaster's Department on account of appropriations for the fiscal year, with balance remaining in their hands; also statement as to sales of quartermasters' property to officers and soldiers of the Army during the fiscal year ending June 30, 1886.

4. Statement of returns of clothing and equipage received and examined, and of letters received and written relating to their settlement during the fiscal year ending June 30, 1886.

5. Report of Lieut. Col. J. G. Chandler, deputy quartermaster-general, U. S. Army, of the operations of the barracks and quarters branch of the Quartermaster-General's Office during the fiscal year ending June 30, 1886.

A.—Statement compiled from latest data on file, showing actual expenditures made on account of barracks and quarters during the fiscal year ending June 30, 1886.

B.—Statement showing location and cost of property rented by the Quartermaster's Department and amount paid for commutation of quarters for general service men.

6. Report of Lieut. Col. C. G. Sawtelle, deputy quartermaster-general, U. S. Army, of the operations of the Quartermaster-General's Office, pertaining to transportation and indebted railroads, regular and miscellaneous supplies, and miscellaneous claims and accounts during the fiscal year ending June 30, 1886.

The following described papers accompany this report, viz:

A.—Statement of all troops and property transported under direction of the Quartermaster's Department during the fiscal year ending June 30, 1886.

B.—Table showing principal movements of troops during the fiscal year ending June 30, 1886.

C.—Statement of vessels owned or purchased by the Government and employed in the Quartermaster's Department during the year ending June 30, 1886.

D.—Statement of vessels chartered, impressed, or employed by the Quartermaster's Department during the year ending June 30, 1886.

E.—Abstracts of contracts for wagon and water transportation, entered into by the Quartermaster's Department, received at the office of the Quartermaster-General during the fiscal year ending June 30, 1886.

F.—Statement showing in detail cost of transportation of the Army during the fiscal year ending June 30, 1886, arranged by items and according to departments, and independent posts and depots, together with a statement of the number of persons and pounds of freight transported.

7. Report of Lieut. Col. B. C. Card, deputy quartermaster-general, U. S. Army, of the operations of the claims branch of the Quartermaster-General's Office during the fiscal year ending June 30, 1886.

8. Report of Capt. John F. Rodgers, military storekeeper, U. S. Army, of the operations of the clothing-supply branch of the Quartermaster-General's Office during the fiscal year ending June 30, 1886.

A.—Statement showing articles of clothing, equipage, and material on hand at the issuing depots of the Quartermaster's Department June 30, 1885; quantities purchased, manufactured, received from posts and depots, taken up, sold, transferred to general depots, expended, issued to the Army, and the quantities remaining in depot June 30, 1886.

B.—Detailed statement of articles of clothing, equipage, and materials purchased by the Quartermaster's Department and paid from the appropriation for clothing and equipage during the fiscal year ending June 30, 1886.

C.—Statement of amounts received and remitted by the Quartermaster's Department on account of clothing and equipage, during the fiscal year ending June 30, 1886.

D.—Statement showing remittances on account of clothing and equipage during the fiscal year ending June 30, 1886.

E.—Statement showing articles of clothing and equipage transferred to the Signal Corps of the Army during the fiscal year ending June 30, 1886, also money value of the property.

F.—Statement showing articles of clothing and equipage manufactured at the Military Prison at Fort Leavenworth, Kansas, for the Quartermaster's Department, during the fiscal year ending June 30, 1886; also cost of material, labor, &c.

G.—Statement showing the value of labor performed for the Quartermaster's Department by the Military Prison at Fort Leavenworth, Kansas, during the fiscal year ending June 30, 1886.

H.—Statement showing articles of clothing and equipage issued to the Military Prison at Fort Leavenworth, Kansas, during the fiscal year ending June 30, 1886, and money value of the property.

I.—Statement showing articles of quartermaster's stores issued to Military Prison at Fort Leavenworth, Kansas, during the fiscal year ending June 30, 1886, and money value of the same.

K.—Statement showing average prices at which the various articles of clothing and equipage are charged to the Army of the United States, from July 1, 1886, to June 30, 1887.

L.—Statement showing amount of money realized at the general depots of the Quartermaster's Department and at the Military Prison at Fort Leavenworth, Kansas, from sales of clothing, equipage, materials, &c., and expenses of said sales, during fiscal year ending June 30, 1886.

9. Report of Lieut. Col. E. N. Batchelder, deputy quartermaster-general, U. S. Army, of the affairs relating to the care and maintenance of the national military cemeteries during the fiscal year ending June 30, 1886.

A.—Statement of disbursements of appropriations for national military cemeteries during the fiscal year ending June 30, 1886.

1.—*Report of Lieut. Col. J. G. Chandler, deputy quartermaster-general, U. S. A., of the operations of the inspection branch during the fiscal year ending June 30, 1886.*

QUARTERMASTER-GENERAL'S OFFICE,
July 3, 1886.

GENERAL: I have the honor to submit a report of the operations of the inspection branch of this office during the fiscal year ending June 30, 1886.

The duties of the branch have been principally as follows:

First. Keeping record of all correspondence relating individually to officers of the Quartermaster's Department and to officers doing duty therein; also to clerks, agents, and other employes of that Department, from their original entry into the service to their final discharge therefrom.

Second. Conducting all the correspondence relative to the assignment to duty of officers of the Quartermaster's Department, to the rendition and subject-matter of annual and biennial reports, and the employment and compensation of civilian clerks and other employes of the Quartermaster's Department whose salaries are not fixed by law, and as provided for in paragraph 1422 of the Army Regulations.

Third. Briefing, entering, and filing the monthly personal reports of stations and duties of officers of the Quartermaster's Department and of officers who have performed duty therein, and keeping record of officers of the Quartermaster's Department and of acting assistant quartermasters.

Fourth. Briefing, entering, and filing the monthly returns of stations of officers, keeping the "station book," and the preparation of the "roster" of officers of the Quartermaster's Department, with rank, grade, station, addresses, and services of officers of the Department, and of officers, post quartermaster-sergeants, and agents doing duty therein, published monthly from this office; also preparing monthly returns of officers of the Quartermaster's Department for the Adjutant-General's Office, in accordance with paragraph 722, Army Regulations.

Fifth. Keeping a complete record of all applications, examinations, appointments, and assignments of post quartermaster-sergeants, U. S. Army, authorized by act of Congress approved July 5, 1884.

Sixth. Keeping historical record of clerks, messengers, and others employed in the office of Quartermaster-General.

Seventh. Keeping a record of time lost by clerks, messengers, and others employed in the office of the Quartermaster-General.

Eighth. Keeping record of all decisions affecting the Quartermaster's Department.

Ninth. The filing and distribution of orders, circulars, pamphlets, technical books, and all other printed matter for the use of officers of the Quartermaster's Department.

Tenth. Has charge of the preparation of the semi-monthly and monthly pay-rolls of the clerks, messengers, and other employes of the office of the Quartermaster-General, and prepares the annual report of employes, with compensation, &c., as required by sections 194 and 195, Revised Statutes.

The post quartermaster-sergeants, appointed under the provisions of act of Congress approved July 5, 1884, heretofore referred to, have rendered satisfactory service during the past fiscal year.

Several vacancies, caused, by death and otherwise, have occurred in these positions during the fiscal year, and have been filled, from time to time, by new appointments, so that at the present time the entire number (eighty), as authorized by law, are now in the service.

During the fiscal year just past a number of applications have been received from these sergeants asking for a change of station, giving various reasons therefor. These applications have all been carefully considered, but only such changes made as seemed for the best interest of the service.

It is believed that frequent changes of the stations of these post quartermaster-sergeants will not be beneficial to the service, and applications of this character, it is suggested, should not receive favorable consideration unless it clearly appears that the best interest of the service requires it.

These sergeants have been from time to time assigned to duty where their services appeared to be most needed, and at the present time are distributed throughout the several military departments, &c., as follows:

In the Department of the East	12
In the Department of the Missouri	9
In the Department of the Platte	9
In the Department of Dakota	13
In the Department of Texas	7
In the Department of California	5
In the Department of Arizona	13
In the Department of the Columbia	6
Jefferson Barracks, Missouri	1
West Point, New York	1
David's Island, New York	1
Columbus Barracks, Ohio	1
San Francisco Depot	1
Willets Point, New York	1
	<hr/> 80

The eighty post quartermaster-sergeants now in the service were selected and appointed from the several arms of the service as follows:

From cavalry regiments	17
From artillery regiments	13
From infantry regiments	50
	<hr/> 80

Ten thousand one hundred and twenty-five letters were received, briefed, entered, and indexed, and two thousand and sixty-four letters written in this branch during the last fiscal year.

The following is a statement of the number of orders, circulars, books, pamphlets, &c., received and distributed during the fiscal year:

Designation.	Number received.	Number distributed.
General orders, Adjutant-General's Office.....	55,520	39,920
General court-martial orders, Adjutant-General's Office.....	48,400	42,790
Circulars, Adjutant-General's Office.....	11,840	8,721
Circular-letters, Quartermaster-General's Office.....	1,847	1,576
Miscellaneous circulars, &c.....	18,694	16,783
Books and pamphlets.....	2,272	1,992
Files of general orders and circulars, Adjutant-General's Office, 1885, for binding.....	300	.....
Total	140,173	111,692

Strength of organization, June 30, 1886.

Quartermaster-General.....	1
Assistant quartermaster-generals.....	4
Deputy quartermaster-generals.....	8
Quartermasters.....	14
Assistant quartermasters.....	30
Military storekeepers.....	5
	62

Very respectfully, your obedient servant,

J. G. CHANDLER,

Deputy Quartermaster-General, U. S. A.

THE QUARTERMASTER-GENERAL OF THE ARMY,

Washington, D. C.

QUARTERMASTER-GENERAL'S OFFICE, *July 3, 1886.*

2.—Report of Lieut. Col. J. G. Chandler, deputy quartermaster-general, U. S. A., of the operations of the finance branch for the fiscal year ending June 30, 1886.

This branch has charge of matters relating to the procurement and distribution of funds; the compilation and preparation for Congress of the annual estimates of funds for the service of the Quartermaster's Department, and for funds required for the Quartermaster-General's Office; the examination of estimates of funds received from disbursing officers, and the issue of requests on the Secretary of War for requisitions in favor of such disbursing officers; the issue of requests for the funds required on account of settlements made at the Treasury; the abstracting of weekly and monthly statements of funds for comparison with the Treasury records, and the conducting of the necessary correspondence and the keeping of the prescribed record and necessary memorandum books connected with the foregoing.

From the balance books upon which all debits and credits are recorded, the following statement has been prepared:

Appropriations.	Balance in Treasury undrawn July 1, 1885.	Appropriated.		Placed to credit of appropriations during the year, being proceeds of sales to officers, &c.	Total to be accounted for.	Remitted to disbursing officers.	Requisitions issued on settlements made at Treasury of claims and accounts.	Amounts carried to surplus fund, act June 20, 1874.	Balance in Treasury undrawn June 30, 1886, required for outstanding obligations.	Total accounted for.
		Amount.	Date of act.							
1871 and prior years.										
Officers' transportation				\$23 30	\$23 30			\$23 30		\$23 30
1879 and prior years.										
Regular supplies	\$267 75				267 75				\$267 75	267 75
1881 and prior years.										
Fifty per centum of arrears of Army transportation due certain land-grant railroads	12 48				12 48		\$12 48			12 48
1882 and prior years.										
Regular supplies	248 52				248 52				248 52	248 52
Clothing and equipage	9 93				9 93				9 93	9 93
Barracks and quarters	300 00				300 00				300 00	300 00
Total	558 45				558 45				558 45	558 45
1883 and prior years.										
Regular supplies				5,698 21	5,698 21			5,698 21		5,698 21
Incidental expenses				1,977 54	1,977 54			1,977 54		1,977 54
Horses for cavalry and artillery				685 00	685 00			685 00		685 00
Barracks and quarters				735 15	735 15			735 15		735 15
Transportation of the Army and its supplies				1,968 65	1,968 65			1,968 65		1,968 65
Clothing and equipage				1,478 34	1,478 34			1,478 34		1,478 34
National cemeteries				1 00	1 00			1 00		1 00
Construction and repair of hospitals				18 25	18 25			18 25		18 25
Total				12,562 14	12,562 14			12,562 14		12,562 14

Appropriations.	Balance in Treasury undrawn July 1, 1885.	Appropriated.		Placed to credit of appropriations during the year, being proceeds of sales to officers, &c.	Total to be accounted for.	Remitted to disbursing officers.	Requisitions issued on settlements made at Treasury of claims and accounts.	Amounts carried to surplus fund, act June 20, 1874.	Balance in Treasury undrawn June 30, 1886, required for outstanding obligations.	Total accounted for.
		Amount.	Date of act.							
<i>Transfer account, 1883 and prior years.</i>										
Regular supplies				\$1,654 25	\$1,654 25		\$1,234 82	\$419 43		\$1,654 25
Incidental expenses				407 27	407 27		374 23	93 04		407 27
Horses for cavalry and artillery				373 12	373 12			373 12		373 12
Barracks and quarters				2,182 51	2,182 51		689 52	1,492 99		2,182 51
Transportation of the Army and its supplies				22,496 47	22,496 47		20,884 16	1,612 31		22,496 47
Clothing and equipage				14 53	14 53			14 53		14 53
Total				27,188 15	27,188 15		23,182 73	4,005 42		27,188 15
1884.										
Regular supplies	\$77,884 71			39 27	77,923 98		899 76	77,024 22		77,923 98
Incidental expenses	9,018 97			781 93	9,800 90		321 40	9,476 50		9,800 90
Horses for cavalry and artillery	415 57			362 92	778 49		560 00	218 49		778 49
Barracks and quarters	623 20			582 54	1,205 74		99 50	1,106 24		1,205 74
Transportation of the Army and its supplies	113,358 92			1,207 90	114,566 82		114,566 82			114,566 82
Clothing and camp and garrison equipage	3 55			16,881 18	16,884 73		101 68	16,783 05		16,884 73
National cemeteries	84 17			2 00	86 17			86 17		86 17
Pay of superintendents of national cemeteries	642 50				642 50			642 50		642 50
Construction and repair of hospitals	477 08			1 10	478 18		17 00	461 18		478 18
Fifty per centum of arrears of Army transportation due certain land-grant railroads	33,697 19				33,697 19		12,407 77	21,289 42		33,697 19
Total	236,205 86			19,858 84	256,064 70		128,976 93	127,087 77		256,064 70
1885.										
Regular supplies	3,347 85			111,658 79	115,506 64	\$18,350 00	14,577 50		\$82,579 14	115,506 64
Incidental expenses	23 00			2,668 60	2,691 60		1,260 23		1,431 37	2,691 60
Horses for cavalry and artillery	662 40			1,999 56	2,661 96	1,289 37	250 00		1,122 59	2,661 96
Barracks and quarters	183 64			5,206 65	5,390 29	85 65	1,312 77		3,991 87	5,390 29
Transportation of the Army and its supplies	21 50			46,198 30	46,219 80	14,573 28	31,641 69		4 83	46,219 80
Clothing and camp and garrison equipage	27 52			83,643 28	83,670 80	83,501 71	36 37		132 72	83,670 80

National cemeteries	1,644 20			865 44	2,509 64	2,310 00	118 62		81 02	2,509 64
Pay of superintendents of national cemeteries	220 67			185 01	405 68		40 00		365 63	405 68
Construction and repair of hospitals				2,668 71	2,668 71	340 56	41 85		2,286 30	2,668 71
Fifty per centum of arrears of Army transportation due certain land-grant railroads	91,302 16				91,302 16		51,534 73		39,767 43	91,302 16
Total	97,932 94			255,094 34	353,027 28	120,450 57	100,813 76		131,762 95	353,027 28
1886.										
Regular supplies	\$2,771,000 00	Mar. 3, 1885		104,581 11	2,875,581 11	2,852,926 51	5,708 93		16,945 67	2,875,581 11
Incidental expenses	690,000 00	Mar. 3, 1885		5,634 85	695,634 85	687,047 69	2,795 79		5,791 37	695,634 85
Purchase of horses for cavalry and artillery	180,000 00	Mar. 3, 1885		5,078 38	185,078 38	185,078 32			06	185,078 38
Barracks and quarters	675,000 00	Mar. 3, 1885		59 12	675,059 12	674,647 04	412 08			675,059 12
Transportation of the Army and its supplies	2,900,000 00	Mar. 3, 1885		14,665 80	2,914,665 80	2,686,361 89	227,489 48		814 43	2,914,665 80
Clothing and camp and garrison equipage	1,250,000 00	Mar. 3, 1885		73,982 69	1,323,982 69	1,323,664 23			818 46	1,323,982 69
National cemeteries	100,000 00	Mar. 3, 1885			100,000 00	99,864 39	4 73		130 88	100,000 00
Pay of superintendents of national cemeteries	60,440 00	Mar. 3, 1885			60,440 00	60,211 49			228 51	60,440 00
Construction and repair of hospitals	100,000 00	Mar. 3, 1885		125 82	100,125 82	99,969 77			156 05	100,125 82
Fifty per centum of arrears of Army transportation due certain land-grant railroads	125,000 00	Mar. 3, 1885			125,000 00		48,395 54		76,604 46	125,000 00
Total	8,851,440 00			204,127 77	9,055,567 77	8,669,771 33	284,806 55		100,989 89	9,055,567 77
Indefinite or special purchase of site for Fort Brown, Tex.	25,000 00				25,000 00				25,000 00	25,000 00
Headstones for graves of soldiers in private cemeteries	8,258 28			4 41	8,262 69	925 00	4,791 72		2,545 97	8,262 69
Road from Chattanooga to the national cemetery, Tennessee	53 87				53 87				53 87	53 87
Road from Fort Scott to the national cemetery, Kansas	873 70				873 70				873 70	873 70
Military posts	125,024 16	Mar. 3, 1885		3 91	290,028 07	220,000 00			70,028 07	290,028 07
Fort Gratiot Cemetery, Michigan	2,985 00			101 75	3,086 75	2,976 00			110 75	3,086 75
Road from Springfield to the national cemetery, Missouri	20,000 00	Mar. 3, 1885			25,000 00	21,450 00			3,550 00	25,000 00
Military posts for the protection of the Rio Grande frontier				67	67				67	67
Carson City Cemetery, Nevada				512 50	512 50				512 50	512 50
Road from Baton Rouge to the national cemetery, Louisiana	6,000 00	Mar. 3, 1885			6,000 00				6,000 00	6,000 00
Road from Marietta to the national cemetery, Georgia	5,000 00	Mar. 3, 1885			5,000 00				5,000 00	5,000 00
Remodeling old Produce Exchange building, New York City	200,000 00	Feb. 2, 1886			200,000 00	17,177 00			182,823 00	200,000 00

Appropriations.	Balance in Treasury undrawn July 1, 1885.	Appropriated.		Placed to credit of appropriations during the year, being proceeds of sales to officers, &c.	Total to be accounted for.	Remitted to disbursing officers.	Requisitions issued on settlements made at Treasury of claims and accounts.	Amounts carried to surplus fund, act June 20, 1874.	Balance in Treasury undrawn June 30, 1886, required for outstanding obligations.	Total accounted for.
		Amount.	Date of act.							
Purchase of Fort Brown Reservation, Texas.	-----	\$160,000 00	Mar. 3, 1885	-----	\$160,000 00	-----	-----	-----	\$160,000 00	\$160,000 00
Military post at Fort McKinney, Wyo.	-----	-----	-----	\$206 00	206 00	-----	-----	-----	206 00	206 00
Military post near northern boundary of Montana (Fort Assiniboine).	-----	-----	-----	25	25	-----	-----	-----	25	25
Monument, Baxter Springs Cemetery, Kansas.	-----	4,000 00	Mar. 3, 1885	-----	4,000 00	\$4,000 00	-----	-----	-----	4,000 00
Army and Navy Hospital, Hot Springs, Kans.	-----	12,500 00	Mar. 3, 1885	-----	12,500 00	12,500 00	-----	-----	-----	12,500 00
Purchase of old Produce Exchange building, New York City.	-----	250,000 00	Feb. 2, 1886	-----	250,000 00	250,000 00	-----	-----	-----	250,000 00
Roads on Fort Leavenworth Military Reservation.	-----	10,000 00	Mar. 3, 1885	-----	10,000 00	10,000 00	-----	-----	-----	10,000 00
Depot quartermaster buildings, at Saint Paul, Minn.	-----	30,000 00	Mar. 3, 1885	-----	30,000 00	20,944 50	\$55 50	-----	-----	30,000 00
Funeral expenses of General U. S. Grant:	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Payment to undertaker	-----	6,303 75	Mar. 26, 1886	-----	6,303 75	6,303 75	-----	-----	-----	6,303 75
Reimbursement to Quartermaster's Department	-----	12,037 93	Mar. 26, 1886	-----	12,037 93	-----	12,037 93	-----	-----	12,037 93
Stenographer	-----	195 00	Mar. 26, 1886	-----	195 00	-----	195 00	-----	-----	195 00
Telegrams	-----	452 83	Mar. 26, 1886	-----	452 83	-----	452 83	-----	-----	452 83
Mileage	-----	353 68	Mar. 26, 1886	-----	353 68	-----	353 68	-----	-----	353 68
Total	\$182,195 01	866,843 19	-----	829 40	1,049,867 69	575,276 25	17,886 66	-----	456,704 78	1,049,867 69
<i>Signal Service, 1884.</i>										
Regular supplies	5,468 48	-----	-----	-----	5,468 48	-----	-----	\$5,468 48	-----	5,468 48
Incidental expenses	466 74	-----	-----	-----	466 74	-----	-----	466 74	-----	466 74
Barracks and quarters	2,743 58	-----	-----	-----	2,743 58	-----	1,311 80	1,431 78	-----	2,743 58
Transportation	14,588 10	-----	-----	-----	14,588 10	-----	1,011 38	13,576 72	-----	14,588 10
Clothing and camp and garrison equipage	17,900 68	-----	-----	-----	17,900 68	-----	4 63	17,896 05	-----	17,900 68
Total	41,167 58	-----	-----	-----	41,167 58	-----	2,327 81	38,839 77	-----	41,167 58

<i>Signal Service, 1885.</i>									
Regular supplies	781 53			1,872 18	2,653 71	395 11	471 38		
Incidental expenses	60 00			531 29	591 29				
Barracks and quarters				127 18	127 18				
Transportation	6,852 50			4,292 92	11,145 42		828 44		
Clothing and camp and garrison equipage	40 99			389 08	430 07				
Total	7,735 02			7,212 65	14,947 67	395 11	1,299 82	13,252 74	14,947 67
<i>Signal Service, 1886.</i>									
Regular supplies		58,638 40	Mar. 3, 1885	7 73	58,646 13	58,638 28		7 85	58,646 13
Incidental expenses		1,954 00	Mar. 3, 1885		1,954 00	1,895 00		59 00	1,954 00
Barracks and quarters		85,608 00	Mar. 3, 1885	9 67	85,617 67	85,608 00		9 67	85,617 67
Transportation		35,505 00	Mar. 3, 1885		35,505 00	24,005 00	3,241 74	8,258 26	35,505 00
Clothing and camp and garrison equipage		2,873 89	Mar. 3, 1885	11 87	2,885 76	2,873 89		11 87	2,885 76
Total		184,579 29		29 27	184,608 56	173,020 17	3,241 74	8,346 65	184,608 56
Grand total	566,075 09	9,902,862 48		526,925 95	10,995,863 52	9,538,913 43	562,548 48	182,518 40	711,883 21
									10,995,863 52

NOTE.—Of the \$267,857.01 appropriated by act of July 5, 1884, for "claims for quartermasters stores and commissary supplies," requisitions have been issued from this office during the fiscal year, for \$371.25. Of the \$224,182.76 appropriated by act of February 20, 1886, for "claims for quartermasters stores and commissary supplies," requisitions have been issued from this office for \$223,883.36. Of the \$305,926.64 appropriated by act of May 17, 1886, for "claims for quartermasters stores and commissary supplies," requisitions have been issued from this office for \$273,727.15. Of the amounts appropriated for the relief of various parties covered by war-relief warrant No. 468, the books of this branch show payments as follows: Lizzie D. Clarke, widow of Thomas L. Clarke, deceased, \$60,000; legal representatives of John Hatfield, deceased, \$650; Frances E. Stewart, administratrix of Michael S. Stewart \$3,160.50. Sufferers by loss of Government steamer J. Don Cameron, \$1,946.07

Atlanta, Ga	3,385 37	2,299 96	.....	800 00	564 00	.....	.....	27,663 17	18,249 50	52,462 00
Powder Depot, New Jersey.....	200 00									200 00
Alleghany Arsenal.....	823 90			64 50	69 25					957 65
Augusta Arsenal.....	1,233 65	379 00			320 50					1,933 15
Benicia Arsenal.....	3,354 95	18 00			635 00					4,007 95
Frankford Arsenal.....		141 25		288 00	1,031 86					1,461 11
Kennebec Arsenal.....	800 00	5 00			15 00					820 00
Indianapolis Arsenal.....	973 15									973 15
Rock Island Arsenal.....	3,571 10	940 00			1,554 24					6,065 34
Watertown Arsenal.....	2,299 84	16 00			328 47					2,644 31
Watervliet arsenal.....	1,053 34	235 00			360 09					1,648 43
Total depots, posts, &c.....	263,810 25	197,481 28	138,685 12	149,737 31	540,449 03	1,317,657 82	6,668 97	97,688 89	59,721 49	2,771,900 16
Grand total.....	2,854,931 57	689,683 99	185,078 32	678,979 19	2,748,638 12	1,326,941 43	99,969 77	99,871 89	60,211 49	8,744,305 77

QUARTERMASTER-GENERAL.

Amounts remitted from regular appropriations.

Divisions, departments, &c.	Regular supplies.	Incidental expenses.	Cavalry and artillery horses.	Barracks and quarters.	Transportation of the Army and its supplies.	Clothing, camp, and garrison equipage.	Construction and repair of hospitals.	National cemeteries.	Pay of superintendents of national cemeteries.	Total.
Division of the Atlantic.....	\$199,426 35	\$76,971 57	\$862 50	\$107,210 51	\$182,510 66	\$48 68	\$21,992 45	.....	.....	\$589,022 82
Headquarters Division of the Missouri....	15,877 25	23,473 51	2,500 00	23,162 55	81,870 20	4,617 80	.....	\$43 50	.....	156,543 81
Department of the Missouri.....	475,351 47	76,064 25	.....	72,651 73	512,465 42	6 00	19,760 22	.....	.....	1,156,299 09
Department of Dakota.....	496,540 22	72,257 70	.....	59,193 02	325,021 69	850 00	8,593 13	.....	.....	962,455 76
Department of the Platte.....	371,835 00	66,333 55	1,867 60	65,459 31	192,185 20	20 00	8,538 83	.....	.....	701,239 49
Department of Texas.....	266,685 49	56,641 70	.....	48,858 78	213,859 77	5 60	23,469 03	.....	.....	609,520 37
Total Division of the Missouri.....	1,626,289 43	299,769 71	4,867 60	269,325 39	1,325,402 28	5,499 40	55,361 21	43 50	.....	3,586,058 52
Department of California.....	149,436 39	46,850 93	28,663 10	50,660 59	189,065 11	.....	15,619 70	2,132 00	\$490 00	482,917 82
Department of Columbia.....	178,642 30	30,565 04	.....	42,593 87	191,259 38	458 33	327 44	.....	.....	443,846 36
Department of the Arizona.....	436,030 79	35,742 39	12,500 00	55,422 37	257,675 43	.....	.....	.....	.....	797,370 98
Total Division of the Pacific.....	764,109 48	113,158 36	41,163 10	148,676 83	637,999 92	458 33	15,947 14	2,132 00	490 00	1,724,135 16
Depot at Washington.....	35,183 90	29,049 85	.....	8,438 66	32,121 42	.....	.....	51,877 33	22,200 00	178,871 46
Depot at Philadelphia.....	6,958 18	25,352 03	.....	5,814 01	32,262 33	604,245 03	.....	6,936 41	2,288 00	683,355 99
Depot at New York.....	40,314 30	84,408 67	.....	88,122 34	131,367 35	1,716 50	.....	100 00	.....	246,029 16
Depot at Jeffersonville.....	55,604 62	29,947 64	.....	5,657 49	44,468 42	86,251 39	.....	.....	.....	221,929 56
Depot at San Francisco.....	13,872 99	21,244 50	.....	12,116 55	29,264 23	348,215 34	.....	.....	.....	424,713 61
Depot at Saint Louis.....	21,847 01	15,896 54	135,282 47	13,461 43	185,252 15	12,313 09	.....	6,682 08	10,563 99	401,278 76
Columbus Barracks.....	9,987 45	8,739 63	.....	2,933 45	18,164 10	5 00	1,750 17	.....	.....	36,579 86
Jefferson Barracks.....	18,814 30	7,922 17	1,403 65	13,517 67	5,506 09	4,038 75	4,412 00	.....	.....	55,613 63
David's Island, New York Harbor.....	4,731 25	4,870 98	.....	37,959 71	15,622 93	.....	17 50	.....	.....	63,202 37
West Point, N. Y.....	24,569 27	11,542 88	2,000 00	1,020 50	7,675 58	.....	203 60	.....	.....	47,011 83
Louisville, Ky., disbursing agency.....	578 05	2,542 00	.....	240 00	17,417 58	.....	.....	4,449 90	6,420 00	31,647 53
Willetts Point, New York Harbor.....	9 22	1,844 89	.....	10,000 00	693 85	57 00	285 70	.....	.....	12,890 66
Springfield Armory.....	1,771 52	320 00	.....	.....	.....	.....	.....	.....	.....	2,091 52
Military Prison, Fort Leavenworth, Kans..	10,929 07	3,203 96	.....	.....	15,754 59	260,815 72	.....	.....	.....	290,703 34
Hot Springs, Ark.....	234 82	1,228 00	.....	.....	.....	.....	.....	.....	.....	1,462 82
Atlanta, Ga.....	3,385 37	2,299 96	.....	300 00	561 00	.....	.....	27,663 17	13,249 50	52,462 00
Powder Depot, New Jersey.....	200 00	.....	.....	.....	.....	.....	.....	.....	.....	200 00
Allegheny Arsenal.....	823 90	.....	.....	64 50	69 25	.....	.....	.....	.....	957 65
Augusta Arsenal.....	1,233 65	379 00	.....	.....	320 50	.....	.....	.....	.....	1,933 15
Benicia Arsenal.....	3,354 95	18 00	.....	.....	635 00	.....	.....	.....	.....	4,007 95
Frankford Arsenal.....	.....	141 25	.....	288 00	1,031 86	.....	.....	.....	.....	1,461 11
Kennebec Arsenal.....	800 00	5 00	.....	.....	15 00	.....	.....	.....	.....	820 00
Indianapolis Arsenal.....	973 15	.....	.....	.....	.....	.....	.....	.....	.....	973 15
Rock Island Arsenal.....	3,571 10	940 00	.....	.....	1,554 24	.....	.....	.....	.....	6,065 34

Watertown Arsenal	2,299 84	16 00			328 47					2,644 31
Watervliet Arsenal	1,058 84	235 00			360 09					1,648 43
Total depots, posts, &c	263,101 25	197,147 95	138,685 12	149,434 81	540,449 03	1,317,657 82	6,668 97	97,688 89	59,721 49	2,770,554 83
Grand total	2,852,926 51	687,047 69	185,078 32	674,647 04	2,686,361 89	1,323,664 23	99,969 77	99,864 39	60,211 49	8,669,771 33

Amounts estimated for from indefinite or special appropriations.

Divisions, departments, &c.	Military posts.	Fort Gratiot cemetery, Michigan.	Army depot buildings at St. Paul, Minn.	Road from Springfield to national cemetery, Missouri.	Monument, Baxter Springs cemetery, Kansas.	Headstones for graves of soldiers in private cemeteries.	Purchase of Produce Exchange building, New York City.	Remodeling old Produce Exchange building, New York City.	Funeral expenses of General U. S. Grant—payment to undertaker.	Army and Navy hospital at Hot Springs, Ark.	Roadson Fort Leavenworth Military Reservation.	Total.
Division of the Atlantic	\$40,000											\$40,000 00
Division of the Missouri		\$2,976										2,976 00
Department of the Missouri	30,000										\$10,000	40,000 00
Department of Dakota			\$29,944 50									29,944 50
Department of the Platte	55,000											55,000 00
Department of Texas	75,000											75,000 00
Total division of the Missouri	160,000	2,976	29,944 50								10,000	202,920 50
Department of California	20,000											20,000 00
Depot at Washington				\$21,450	\$4,000	\$1,985						27,435 00
Depot at New York							\$250,000	\$17,177	\$6,303 75			273,480 75
Hot Springs, Ark										\$12,500		12,500 00
Total	220,000	2,976	29,944 50	21,450	4,000	1,985	250,000	17,177	6,303 75	12,500	10,000	576,336 25

Amounts remitted from indefinite or special appropriations same as above.

The following table shows the amounts asked and supplied of certain appropriations made for the support of the Signal Service of the Army, and which the honorable the Secretary of War, by General Orders No. 66, Adjutant-General's Office, June 12, 1885, directed, for convenience, to be disbursed by the Quartermaster-General:

[Officer disbursing—depot quartermaster, Washington, D. C.]

Object of appropriation.	Asked.	Supplied.
Signal Service:		
Regular supplies, 1886.....	\$58,638 28	\$58,638 28
Incidental expenses, 1886.....	1,895 00	1,895 00
Barracks and quarters, 1886.....	85,608 00	85,608 00
Transportation, 1886.....	24,005 00	24,005 00
Clothing and camp and garrison equipage, 1886.....	2,873 89	2,873 89
Total	173,020 17	173,020 17

Respectfully submitted.

J. G. CHANDLER,
Deputy Quartermaster-General, U. S. A.

QUARTERMASTER-GENERAL'S OFFICE,
September 8, 1886.

3.—*Report of Lieut. Col. J. G. Chandler, deputy quartermaster-general, U. S. A., of the operations of the money and property accounts branch for the fiscal year ending June 30, 1886.*

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., October 5, 1886.

GENERAL: I have the honor to submit the accompanying statements, showing the operations of the accounts branch of this office for the fiscal year ended June 30, 1886.

Very respectfully, your obedient servant,

J. G. CHANDLER,
Deputy Quartermaster-General, U. S. A.

The QUARTERMASTER-GENERAL OF THE ARMY.

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department for the fiscal year 1886, in the divisions, departments, general depots, and independent posts of the Army, as shown by the accounts of officers from July 1, 1885, to August, 1886, so far as accounts have been received in this office, not including appropriation "Army transportation."

Division and post.	REGULAR SUPPLIES.											
	Forage.						Fuel.			Forage-masters and agents.	Stoves and ranges.	
	Hay.	Oats.	Barley.	Corn.	Bran.	Straw.	Wood.	Coal.	Commuta- tion of fuel for enlisted men.		Heating.	Cooking and fixtures.
<i>Division of the Atlantic and Department of the East.</i>												
Headquarters, Governor's Island, N. Y. H	\$3,873 27	\$4,460 67	-----	\$342 25	\$302 43	\$1,088 90	\$183 75	\$12,574 21	\$1,931 10	-----	-----	-----
Baltimore, Md.	1,056 92	1,325 65	-----	-----	-----	220 68	4,303 14	4,377 53	10 35	-----	\$538 68	\$305 52
Boston, Mass	5,224 87	5,889 34	-----	32 85	343 25	1,217 98	3,334 35	14,163 41	-----	-----	106 24	151 42
Buffalo, N. Y	2,089 80	3,393 94	-----	212 90	74 45	380 83	3,983 96	9,871 96	-----	-----	157 50	58 35
New Orleans, La	5,445 96	5,684 12	-----	-----	-----	1,061 48	5,158 57	3,057 96	-----	-----	798 45	251 55
Saint Augustine and Saint Francis Bar- racks, Fla	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	14 00	-----
Washington Barracks, D. C	-----	-----	-----	-----	-----	-----	8 25	-----	-----	-----	446 00	756 83
Newport Barracks, Ky	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	94 22	1,023 96
Mount Vernon Barracks, Ala	650 51	552 50	-----	-----	-----	119 18	-----	6 00	-----	-----	-----	-----
Madison Barracks, N. Y.	-----	-----	-----	-----	-----	19 80	-----	-----	-----	-----	-----	-----
Plattsburg Barracks, N. Y	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	179 60	-----
Little Rock Barracks, Ark	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	79 22	14 00
Fort Monroe, Va	1,378 20	1,316 82	-----	207 62	-----	310 62	700 50	7,698 08	-----	-----	110 75	80 00
Fort McHenry, Md.	-----	-----	-----	-----	-----	-----	-----	19 00	-----	-----	662 42	596 56
Fort Barrancas, Fla	-----	-----	-----	-----	-----	16 00	10 50	-----	-----	-----	-----	-----
Fort Warren, Mass	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	10 00
Fort Preble, Me	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	38 85	82 82
Fort Trumbull, Conn	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	451 00
Fort Adams, R. I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	212 00	47 80
Fort Hamilton, N. Y. H	-----	-----	-----	-----	-----	-----	-----	172 50	-----	-----	541 00	160 00
Fort Wadsworth, N. Y. H	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	425 16	171 84
Fort Columbus, N. Y. H	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	187 39	61 50
Fort Wayne, Mich	-----	-----	-----	-----	-----	-----	-----	251 10	-----	-----	102 98	145 47
Fort Mackinac, Mich	30 00	27 00	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Fort Porter, N. Y	417 65	465 67	-----	9 30	2 97	49 20	160 54	832 64	-----	-----	-----	139 45
Fort Ontario, N. Y.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	275 30	62 52
Fort Niagara, N. Y	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	13 70	-----
Total	20,167 27	23,115 71	-----	804 92	723 10	4,484 67	17,843 56	53,024 39	1,941 45	-----	4,983 46	4,570 59

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department, &c.—Continued.

Division and post.	REGULAR SUPPLIES.											
	Forage.						Fuel.			Forage- masters and agents.	Stoves and ranges.	
	Hay.	Oats.	Barley.	Corn.	Bran.	Straw.	Wood.	Coal.	Commun- tation of fuel for enlisted men.		Heating.	Cooking and fixtures.
<i>Division of the Missouri.</i>												
Headquarters, Chicago, Ill	\$990 67	\$1,234 41	.....	\$2 80	.....	\$135 88	\$6 50	\$3,330 74	\$2,108 06	.....	\$91 12	\$111 10
<i>Department of the Missouri.</i>												
Headquarters and depot, Fort Leaven- worth, Kans	45,398 52	41,979 33	.....	72,999 37	\$5,850 56	1,599 60	98,113 66	29,302 10	1,939 67	\$1,025 00	2,845 31	1,552 44
Military Prison, Fort Leavenworth, Kans.										150 00	35 30	4,250 00
Denver, Colo	24 63	36 50	.....			3 20		472 55				
Santa Fé, N. Mex	63,483 32	11,413 45	\$1,725 47	26,222 07	1,485 00		24,974 17	13,805 01	933 80		269 00	36 00
Fort Reno, Ind. T	5,123 69			164 54				7 65		825 00		
Fort Sill, Ind T	82 74			112 78				33 88		900 00		
Fort Hays, Kans		125 19		102 69	11 57							
Fort Riley, Kans	411 79	623 84		34 70			216 71					
Fort Wingate, N. Mex							638 55			900 00		
Fort Gibson, Ind. T	422 52			3 90			1 25					
Fort Lyon, Colo	2 00			3 90			2 35					
Fort Elliott, Tex	1,457 43	16 25		3 20						925 00		
Fort Supply, Ind. T	6,546 50	1 20								900 00		
Uncompahgre Cantonment, Colo.		740 00			70 00			85 09				
Camp near Caldwell, Kans	9 75							7 50				
In the field	2,296 01			83 29			132 40					
Total	125,258 90	54,935 76	1,725 47	99,726 54	7,417 13	1,602 80	124,120 62	43,672 16	2,873 47	5,625 00	3,149 61	5,838 44
<i>Department of the Platte.</i>												
Headquarters, fort, and depot, Omaha, Nebr	54,034 34	65,167 50	.....	26,673 22	3,794 17	4,015 46	69,674 73	79,478 38	1,660 70	2,514 96	2,677 65	1,837 25
Cheyenne Depot, Wyo	1,102 65	1,286 30	.....	271 12			145 00			840 00	49 87	351 66
Ogden, Utah	9 68	14 88	.....			1 00		7 00				2 65
Fort McKinney, Wyo	2,664 45	724 59	.....				423 45					
Fort Washakie, Wyo	80 38	1 08	.....								

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department, &c.—Continued.

Division and post.	REGULAR SUPPLIES.											
	Forage.						Fuel.			Forage masters and agents.	Stoves and ranges.	
	Hay.	Oats.	Barley.	Corn.	Bran.	Straw.	Wood.	Coal.	Communtation of fuel for enlisted men.		Heating.	Cooking and fixtures.
<i>Department of Arizona.</i>												
Whipple Barracks, Prescott, Ariz	\$83,414 68	\$10,451 80	\$134,354 20	\$23,562 25	\$4,840 79	\$4,574 37	\$56,224 22	\$112 02	\$2,006 50	.....	.....	\$4 50
Fort Huachuca, Ariz	3,166 14	462 59	1,007 52	272 14	.....	.....	193 88	.....	.....	.....	.....	.....
Fort Thomas, Ariz .....	.....	.....	1,840 84	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Apache, Ariz	14,078 91	.....	2,229 75	3,811 30	.....	.....	.....	.....	.....	.....	.....	.....
Fort Bowie, Ariz	1 80	.....	18 76	.....	.....	.....	6 57	.....	.....	.....	.....	.....
Fort Mojave, Ariz	1,300 16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Carlos Agency, Ariz	2,660 91	.....	4,505 99	502 38	.....	.....	1,737 00	.....	.....	.....	.....	.....
Total	104,682 60	10,914 39	143,957 06	28,148 07	4,840 79	4,574 37	58,161 67	112 02	2,006 50	.....	.....	4 50
<i>Department of the Columbia.</i>												
Vancouver Barracks and Depot, Wash ...	4,237 37	8,483 02	377 20	.....	245 16	1,216 57	15,742 47	2 50	1,776 33	.....	\$1,260 20	87 05
Portland, Oreg	25,265 84	6,980 10	3,303 01	200 64	518 80	1,772 46	35,679 84	.....	.....	.....	735 00	904 70
Fort Spokane, Wash	362 91	276 97	13 14	.....	90 49	.....	.....	.....	.....	.....	.....	.....
Fort Walla Walla, Wash	885 04	378 89	228 77	.....	138 00	22 00	41 25	.....	.....	\$696 16	.....	.....
Boise Barracks, Idaho	10 08	4 32	3 24	.....	.....	.....	.....	.....	.....	.....	.....	5 00
Fort Canby, Wash .....	.....	.....	.....	.....	.....	.....	130 09	.....	.....	.....	.....	110 52
Fort Klamath, Oreg	302 94	240 19	9 67	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Cœur d'Alene, Idaho	571 38	596 52	10 00	.....	.....	.....	10 32	.....	.....	.....	.....	.....
Seattle, in the field, Wash	20 48	.....	.....	.....	.....	.....	67 50	333 00	.....	.....	.....	.....
Total	31,656 04	16,960 01	3,945 03	200 64	992 45	3,011 03	51,672 07	335 50	1,776 33	696 16	1,995 20	1,107 27
<i>General depots.</i>												
Washington, D. C	7,745 46	9,663 13	.....	.....	109 38	1,405 18	8,281 80	10,855 79	1,602 12	1,674 96	164 25	.....
New York, N. Y	2,056 80	2,089 35	.....	58 13	15 42	1,315 53	940 85	20,066 50	1,111 04	.....	2,444 07	2,804 10
Philadelphia, Pa	536 07	575 71	.....	.....	.....	83 27	86 93	611 82	.....	.....	189 15	251 50
Jeffersonville, Ind	1,029 99	1,088 71	.....	141 53	.....	140 50	157 00	2,769 71	.....	.....	514 23	2,955 65

San Francisco, Cal	731 61	1,194 44	.....	.....	131 99	22 00	2,004 41	89 70	.....	2,293 83	4,668 96
Saint Louis, Mo	2,222 91	2,728 64	.....	24 63	294 05	2,183 15	1,395 53	623 46	.....	2,248 80	517 35
Total	14,322 84	17,939 98	224 29	124 80	3,370 52	11,671 73	37,703 76	3,426 32	1,674 96	7,854 33	11,197 56
<i>Independent posts.</i>												
West Point, N. Y	9,159 18	7,151 99	.....	83 20	596 97	2,045 96	794 00	5,501 87	526 50	.....	51 88
Jefferson Barracks, Mo	2,627 01	8,635 59	.....	520 36	213 76	1,640 50	.....	2,135 60	225 00	572 70	558 00
Columbus Barracks, Ohio	876 80	1,134 19	.....	.....	.....	121 64	215 46	2,324 09	.....	1,272 26	1,044 56
David's Island, New York Harbor .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,153 75	388 50
Hot Springs, Ark	115 21	93 91	.....	.....	.....	.....	7 00	.....	.....	.....	.....
Powder Depot, Dover, N. J .....	.....	.....	.....	.....	.....	.....	74 00	106 27	.....	.....	.....
Kennebec Arsenal, Me	76 66	133 44	.....	2 52	.....	13 28	137 50	328 24	.....	.....	.....
Frankford Arsenal, Pa	146 26	229 98	.....	.....	.....	31 30	.....	1,122 51	.....	.....	.....
Allegheny Arsenal, Pa	98 29	116 75	.....	.....	.....	17 75	.....	494 83	.....	.....	.....
Indianapolis Arsenal, Ind	99 62	162 15	.....	.....	.....	33 00	.....	565 11	.....	.....	.....
Augusta Arsenal, Ga	195 85	283 99	.....	.....	.....	58 29	568 75	61 05	.....	.....	.....
National Armory, Springfield, Mass	127 75	157 28	.....	.....	.....	39 00	.....	1,424 42	.....	.....	.....
Benicia Arsenal, Cal	491 41	330 64	181 71	.....	.....	.....	.....	2,050 73	.....	.....	.....
Watertown Arsenal, Mass	167 10	241 33	.....	.....	.....	85 61	27 00	1,739 19	.....	.....	.....
Watervliet Arsenal, N. Y	228 79	228 47	.....	.....	26 00	48 63	81 75	413 20	.....	.....	.....
Rock Island Arsenal, Ill	139 74	441 75	.....	.....	.....	69 39	.....	3,118 07	.....	.....	.....
Atlanta, Ga	1,380 08	1,027 00	.....	116 25	.....	168 04	640 52	255 26	.....	.....	.....
Total	15,929 81	20,368 46	181 71	722 33	836 73	4,372 39	2,545 98	21,643 44	526 50	225 00	5,998 71	2,042 94

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department, &c.—Continued.

Division and post.	REGULAR SUPPLIES.												
	Lights.			Station- ery.	Print- ing.	Advertis- ing.	Other employés.	Print- ing ma- terial.	Printers and pressmen.	Lawn- mowers.	Inspector of fuel.	Scales.	All expenses not otherwise enumer- ated.
	Lamps and lanterns.	Mineral oil.	Lights.										
Division of the Atlantic and Department of the East.													
Headquarters, Governor's Island, N. Y. H.				\$140 00	\$8 75	\$413 57			\$1,700 00	\$5 00			
Baltimore, Md.	\$38 90		\$27 51	309 35						31 25			\$277 28
Boston, Mass.			17 10	16 25									70 59
Buffalo, N. Y.	18 90			57 44									87 08
New Orleans, La.	121 14			36 73						11 60			352 37
Saint Augustine and Saint Francis Barracks, Fla.			8 10	1 35									
Washington Barracks, D. C.			2,670 41	19 00			\$505 00			38 67			33 40
Newport Barracks, Ky.	7 20		4 35	9 78		5 90							
Jackson Barracks, La.			7 64							8 25			2 40
Mount Vernon Barracks, Ala.			3 69										
Madison Barracks, N. Y.			7 65				20 00						
Plattsburg Barracks, N. Y.			1 96										20 00
Little Rock Barracks, Ark.			9 72	2 45									134 15
Fort Monroe, Va.			7 00	88 30		21 25		\$391 54					2,865 92
Fort McHenry, Md.	2 00		7 95										135 00
Fort Barrancas, Fla.			4 75										
Fort Warren, Mass.			4 45										
Fort Preble, Me.	6 44		8 40	6 74									5 32
Fort Trumbull, Conn.	13 80		2 70										
Fort Adams, R. I.			17 70							34 00			184 00
Fort Hamilton, N. Y. H.	76 50		9 79										
Fort Schuyler, N. Y. H.			1 52										
Fort Wadsworth, N. Y. H.			63 16	1 00									
Fort Columbus, N. Y. H.			44 80	61 45			180 00			5 00			81 29
Fort Wayne, Mich.	14 60		16 38	5 55									21 00
Fort Brady, Mich.			14 83										
Fort Mackinac, Mich.			6 12										
Fort Porter, N. Y.			7 44										
Fort Ontario, N. Y.			3 72										34
Fort Niagara, N. Y.			3 88										129 80
Total	299 48		2,988 72	755 39	8 75	440 72	705 00	391 54	1,700 00	133 77			4,399 44

Division of the Missouri.

Headquarters, Chicago, Ill.....	81 00	608 96	1,136 35				67 77	1,785 00			275 57
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Department of the Missouri.

Headquarters and depot, Fort Leavenworth, Kans.....	197 73	59 57	1,701 06	377 38	429 67	3,232 00	25 00	3,489 75	140 26		1,413 22
Military Prison, Fort Leavenworth, Kans.....		87 64	73 45			900 00	288 86				2,356 01
Denver, Colo.....		12 00									8 00
Santa Fe, N. Mex.....		216 80	141 00	125 33	353 83			1,080 00			76 90
Fort Reno, Ind. T.....		24 20									5 50
Fort Sill, Ind. T.....		6 50				10 00					3 00
Fort Bliss, Tex.....		10 00									
Fort Union, N. Mex.....		12 40									44 54
Fort Hays, Kans.....		16 32									
Fort Riley, Kans.....		33 34							24 30		409 25
Fort Selden, N. Mex.....	90	1 97									
Fort Wingate, N. Mex.....		5 82									
Fort Gibson, Ind. T.....		4 74				23 59					1 31
Fort Lyon, Colo.....		12 72									144 63
Fort Lewis, Colo.....		7 00									
Fort Bayard, N. Mex.....		11 20									
Fort Elliott, Tex.....		10 02									
Fort Supply, Ind. T.....		10 00									
Uncompahgre, Cantonment, Colo.....		4 02									
In the field.....		12 00									
Total.....	198 63	558 62	1,915 51	502 71	788 50	4,185 58	313 86	4,569 75	170 56		4,461 38

Department of the Platte.

Headquarters, fort, and depot, Omaha, Nebr.....	500 98	62 78	403 47	770 73	13 00	6,558 89	13 50	1,980 00	48 05		936 75
Cheyenne Depot, Wyo.....		11 02	20 80			1,980 00				849 00	1,922 87
Fort McKinney, Wyo.....		26 24									
Fort Washakie, Wyo.....		6 05									21 75
Fort Douglas, Utah.....		21 63									
Fort Laramie, Wyo.....		9 93									125 00
Fort Bridger, Wyo.....		5 00									
Fort Sidney, Nebr.....		10 62									
Fort Robinson, Nebr.....		12 60									
Fort Niobrara, Nebr.....		10 00									
Fort Fred Steele, Wyo.....		1 20									
Fort D. A. Russell, Wyo.....		10 00									
Camp Date Creek, Butte, Wyo.....		1 00									
Evanston, in the field, Wyo.....		90									
Total.....	500 98	188 97	424 27	770 73	13 00	8,538 89	13 50	1,980 00	48 05	849 00	3,006 87

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department, &c.—Continued.

[illegible]

Fort Stockton, Tex			4 00										
Camp Pena Colorado, Tex.....			5 40										
Camp Del Rio, Tex.....			5 40										
Camp Rice, or Hancock, Tex.....			387 00										
Camp Eagle Pass, in the field, Tex.....			05										
Total	52 75		85 91	1,569 24		264 02	2,725 34	27 10	1,747 33	225 83			1,924 95
<i>Department of California.</i>													
Headquarters, Presidio of San Francisco, Cal.....			121 03	7 00			3,090 86		5,220 00	3 00	\$901 65		422 18
Fort Mason, Cal			5 70										
Fort Winfield Scott, Cal			5 78										
Alcatraz Island, Cal.....			7 59										
San Diego Barracks, Cal			2 68										
Fort Halleck, Nev			1 62										
Angel Island, Cal			3 18										
Fort Gaston, Cal			2 83										
Fort McDermit, Nev.....			7 83										
Fort Bidwell, Cal.....			5 44										150 00
Benicia Barracks, Cal.....			2 89										960 00
Total			166 57	7 00			3,090 86		5,220 00	3 00	901 65		1,532 18
<i>Department of Arizona.</i>													
Whipple Barracks, Prescott, Ariz.....			92 37	3 00	108 50	1,361 60			2,070 00				688 55
Fort Huachuca, Ariz			23 29										
Fort Apache, Ariz			18 00										2 80
Fort Lowell, Ariz			15 79										28 50
Fort Grant, Ariz			8 26										
Fort Bowie, Ariz			3 86				40 00						120 00
Fort Verde, Ariz			1 32										
Total			162 89	3 00	108 50	1,361 60	40 00		2,070 00				839 85
<i>Department of the Columbia.</i>													
Vancouver Barracks and Depot, Wash.....			56 46	2,323 61		344 00		333 26	2,160 00				551 86
Portland, Oreg	492 27	\$173 00	17 10	1,199 07				10 00		26 50			1,464 71
Fort Spokane, Wash			21 45										6 00
Fort Walla Walla, Wash.....			9 30										240 00
Boise Barracks, Idaho.....			6 13										
Fort Canby, Wash			9 88										
Fort Townsend, Wash			8 16										
Fort Klamath, Oreg.....			18 39										
Fort Cœur d'Alene, Idaho.....			14 28										
Seattle, in the field, Wash.....	2 50			14 13									
Total	494 77	173 00	161 15	3,526 81		344 00		343 26	2,160 00	26 50			2,262 57

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department, &c.—Continued.

Division and post.	REGULAR SUPPLIES.													
	Lights.			Station- ery.	Print- ing.	Adver- tising.	Other employes.	Print- ing ma- terial.	Printers and pressmen.	Lawn- mowers.	Inspector of fuel.	Scales.	All ex- penses not other- wise enumer- ated.	
	Lamps and lanterns.	Mineral oil.	Lights.											
General depots.														
Washington, D. C.			\$294 25	\$1,173 92		\$58 85								\$66 00
New York, N. Y.	\$5,550 40		897 16	1,288 08		442 80	\$1,293 28	\$139 99	\$170 00	\$76 29				1,467 60
Philadelphia, Pa.			489 15	316 36				2 58						154 13
Jeffersonville, Ind.	3 10	\$35,163 80	6 10	809 89	\$159 32	1,185 93	142 60	23 29						3,100 87
San Francisco, Cal.	462 59	171 67	612 15	11,048 27		113 08	194 80	426 18						2,280 80
Saint Louis, Mo.	72 00		265 52	402 00		54 85								4,834 20
Total	6,088 09	35,335 47	2,564 33	15,120 12	459 32	1,855 51	1,630 68	592 04	170 00	76 29				11,903 60
Independent posts.														
West Point, N. Y.			6 72			65 92								330 33
Jefferson Barracks, Mo.		23 00	149 80	21 00		37 95								58 70
Columbus Barracks, Ohio			1,210 83	21 75		12 25	1,390 00							74 15
David's Island, New York Harbor			39 83											156 61
Hot Springs, Ark.		2 40												
Willet's Point, New York Harbor			8 84											
Kennebec Arsenal, Me.														2 06
Frankford Arsenal, Pa.														92
Allegheny Arsenal, Pa.	80		48 01			15 75								
Indianapolis Arsenal, Ind.					1 25									
Augusta Arsenal, Ga.			91											
National Armory, Springfield, Mass.						7 20								
Benicia Arsenal, Cal.			96		3 00	31 40								
Watervliet Arsenal, N. Y.			90			16 50								
Rock Island Arsenal, Ill.			2 16			45 00								
Atlanta, Ga.				7 50										
Total	80	25 40	1,468 90	50 25	4 25	231 97	1,390 00							622 71

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department, &c.—Continued.

Division and post.	INCIDENTAL EXPENSES.												
	Post- age.	Print- ing.	Adver- tising.	Extra duty.					Civilian employes.				
				Mechan- ics.	School- teachers.	Clerks.	Mes- sen- gers.	Laborers.	Clerks.	Laborers.	Messen- gers.	Watch- men.	Spies, interpre- ters, guides, &c.
<i>Division of the Atlantic and Department of the East.</i>													
Headquarters, Governor's Island, N. Y. H.	\$20 00									\$9,577 16		\$1,000 00	
Baltimore, Md.										1,800 00		600 00	
Boston, Mass.										2,750 00		550 00	
Buffalo, N. Y.										2,500 00		500 00	
New Orleans, La.										4,399 99		540 00	
Saint Augustine and Saint Francis Barracks, Fla.				\$261 70		\$78 40		\$223 60					
Washington Barracks, D. C.				472 10	\$151 00	90 30		419 80					
Newport Barracks, Ky.				305 50		67 20		106 40					
Jackson Barracks, La.				232 75	25 00			294 35					
Mount Vernon Barracks, Ala.				438 40	98 10			60 65					
Madison Barracks, N. Y.				465 05		126 75	\$97 35	244 75					
Plattsburg Barracks, N. Y.	50			216 80		97 20		87 20					
Little Rock Barracks, Ark.				323 50		4 20		124 25					
Fort Monroe, Va.				643 55	98 50			396 95	2,471 28				
Fort McHenry, Md.					154 40			444 00	1,200 00	\$29 05			
Fort Barrancas, Fla.			\$7 50	88 00	192 50			402 40				\$196 00	\$60 00
Fort Warren, Mass.				156 20	146 50	127 67		256 45					
Fort Preble, Me.				221 50	192 00	23 80		68 60					
Fort Trumbull, Conn.				212 50	183 50			159 95					
Fort Adams, R. I.				528 50	190 00	115 20		339 90					
Fort Hamilton, N. Y. H.				346 50		211 30		389 65					
Fort Schuyler, N. Y. H.				243 50	183 00			134 65					
Fort Wadsworth, N. Y. H.				44 50	120 50	116 55		213 05					
Fort Columbus, N. Y. H.				194 00	157 50			623 00	1,499 96	1,065 00		300 00	
Fort Wayne, Mich.				336 50	181 50			331 85					
Fort Brady, Mich.				357 50	45 50	106 00		95 05					
Fort Mackinac, Mich.				389 00	200 00			33 60					
Fort Porter, N. Y.				274 50		127 75		196 65	425 00		100 00		
Fort Ontario, N. Y.				151 50				237 80					
Fort Niagara, N. Y.				275 00				131 60					
Total.	20 50		7 50	7,178 55	2,319 50	1,292 32	97 35	6,026 75	26,623 37	1,094 05	3,290 00	496 00	60 00

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department, &c.—Continued

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REPORT OF THE SECRETARY OF WAR.

Division and post.	INCIDENTAL EXPENSES.												
	Post- age.	Print- ing.	Adver- tising.	Extra duty.					Civilian employés.				
				Meehan- ics.	School- teachers.	Clerks.	Mes- sen- gers.	Laborers.	Clerks.	Laborers.	Mes- sen- gers.	Watch- men.	Spies, interpret- ers, guides, &c.
<i>Division of the Missouri.</i>													
Headquarters, Chicago, Ill.....									\$19,786 47	\$14 00	\$2,280 00	\$735 00	-----
<i>Department of the Missouri.</i>													
Headquarters and depot, Fort Leavenworth, Kans.....	\$3 00			\$1,148 50	\$199 00	\$9 70	\$116 90	\$273 65	15,939 33	916 50	795 00	2,849 33	-----
Military Prison, Fort Leavenworth, Kans.....								116 90	1,433 30	90 12	90 00	106 75	-----
Denver, Colo.....									1,599 96		360 00		-----
Fort Stanton, N. Mex.....	15 00			560 00	170 00			400 49					\$178 00
Santa Fé, N. Mex.....	80 04			861 50				263 90	4,800 00	710 00	480 00	790 00	3,167 89
Fort Reno, Ind. T.....				916 80	144 50			290 30					1,100 00
Fort Sill, Ind. T.....				559 00	236 50			208 20					750 00
Fort Bliss, Tex.....	3 00			228 50				199 50					
Fort Union, N. Mex.....				148 50	149 50			511 00					
Fort Hays, Kans.....				332 55				210 35					
Fort Riley, Kans.....				657 22	123 00			260 61	1,459 96				
Fort Selden, N. Mex.....	3 00			169 50	106 50	127 80		44 80					
Fort Wingate, N. Mex.....				782 50	34 50			196 17					1,871 34
Fort Gibson, Ind. T.....				202 25	30 50	36 25		49 70					
Fort Lyon, Colo.....				467 00	146 00			178 40					10 00
Fort Lewis, Colo.....	5 80			767 65	174 00			444 05					
Fort Bayard, N. Mex.....				634 00	182 50	98 00		123 55	300 00				2,694 41
Fort Elliott, Tex.....				124 00	511 50			112 35	50 00				
Fort Supply, Ind. T.....				611 50	276 00			163 80					1,200 00
Uncompahgre Cantonment, Colo.....	1 00			97 00	190 00	88 90		171 80					
Camp near Caldwell, Kans.....									75 00	21 00			6 00
In the field.....				68 00		10 85		10 50					
Total.....	110 84			8,835 97	2,074 00	431 50	116 90	4,230 02	25,657 55	1,737 62	1,725 00	3,746 08	10,972 64

Department of the Platte.

Headquarters, fort, and depot, Omaha, Nebr.	\$141 00	625 00	201 00	104 30	239 10	15,633 20	1,456 67	1,370 00	1,315 00	-----
Cheyenne Depot, Wyo					668 75	5,416 71	909 15	813 33	564 66	-----
Fort McKinney, Wyo		457 00	229 00		295 05					1,900 00
Fort Washakie, Wyo		100 00	178 50		245 45					806 00
Fort Douglas, Utah		1,241 75	363 00	231 50	734 50					-----
Fort Laramie, Wyo		544 50	364 50		280 95					-----
Fort Bridger, Wyo		697 00	175 00	55 30	262 85					-----
Fort Sidney, Nebr		605 35	95 50	53 20	219 90					-----
Fort Robinson, Nebr		306 50	196 70		435 80					-----
Fort Niobrara, Nebr		294 00	318 00		153 30					-----
Fort Fred Steele, Wyo		425 00	75 00		242 35					-----
Fort D. A. Russell, Wyo		1,132 85	182 50	123 95	65 10					-----
Camp Date Creek, Butte, Wyo		89 50			262 25					-----
Evanston, in the field, Wyo										-----
Total	141 00	6,272 45	2,378 70	558 25	4,255 85	21,049 91	2,365 82	2,183 33	1,879 66	2,706 00

Department of Dakota.

Headquarters and post, Fort Snelling, Minn.	15 00	496 00	182 50		461 50	11,082 46	520 00	1,425 00	900 00	-----
Saint Paul, Minn.	12 00				18 20	8,054 89	147 00	1,023 33		-----
Helena, Mont						1,800 00		600 00		-----
Fort Buford, Dak		771 25	273 00		232 05	999 96				273 33
Fort Missoula, Mont		805 50	182 50	125 50	591 35					-----
Fort Yates, Dak		643 91	111 00	18 45	426 45	969 40				600 00
Fort Assiniboine, Mont		873 25	349 50	123 65	540 85	230 55				719 27
Fort Maginnis, Mont.		425 50	152 50		839 40	1,200 00				180 00
Fort Ellis, Mont		311 00	167 00	73 50	411 50					-----
Fort Meade, Dak		771 00	334 00	7 00	1,221 57					-----
Fort Custer, Mont		950 00	206 00	217 40	1,104 60					1,948 00
Fort Shaw, Mont		561 00	299 40		189 60	999 96				720 00
Fort Keogh, Mont.		1,317 00	182 50		963 35					600 00
Fort Sisseton, Dak			182 50		448 75					-----
Fort Pembina, Dak		52 00	166 50		392 10					-----
Fort Randall, Dak		430 00	827 00	244 30	180 25					-----
Fort A. Lincoln, Dak		313 00	365 00		592 10		34 00			-----
Fort Sully, Dak		805 00	365 00		704 80					-----
Fort Totten, Dak		556 50	299 50	114 50	506 05					-----
Fort Bennett, Dak		52 50	181 50		245 70					-----
Camp Poplar River, Mont.		309 50	182 50		426 65					-----
Total	27 00	9,443 91	4,509 40	898 85	25 45	10,556 82	25,337 22	701 00	3,048 33	800 00
										5,040 60

Department of Texas.

Headquarters and depot, San Antonio, Tex.	40 00	\$31 55	253 00	288 50	7 70	569 55	11,074 74	5,455 00	1,250 00	2,880 00	45 00
Fort Clark, Tex.			1,714 51	610 00		422 75	1,200 00	8 75			-----
Fort Concho, Tex			735 50	302 00	32 20	18 20	1,100 00				-----
Fort Davis, Tex.			520 50	158 00		572 25	993 30				72 00
Fort Brown, Tex.	5 00		252 15	341 00	104 95	514 40	47 95				-----

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department, &c.—Continued.

Division and post.	INCIDENTAL EXPENSES.												
	Post- age.	Print- ing.	Adver- tising.	Extra duty.					Civilian employes.				
				Mechan- ics.	School teachers.	Clerks.	Mes- sengers.	Laborers.	Clerks.	Laborers.	Mes- sengers.	Watch- men.	Spies, interpre- ters, guides, &c.
Department of Texas—Continued.													
Fort Ringgold, Tex				\$631 15	\$176 00	\$85 40		\$273 10					
Fort McIntosh, Tex				825 80	180 00			210 70					
Fort Stockton, Tex				199 50	19 45			203 18					
Camp Pena Colorado, Tex				152 00				479 20					
Camp Del Rio, Tex				278 00	83 00			13 30					
Camp Rice or Hancock, Tex								329 00	\$146 00				
Camp Eagle Pass, in the field, Tex				13 00				5 25					
Total	\$45 00		\$31 55	5,58 10	2,187 95	130 25		3,610 88	\$15,315 99	5,604 75	\$1,250 00	\$2,880 00	\$117 00
Department of California.													
Headquarters, Presidio of San Francisco, Cal.				674 00	182 50			835 20	13,609 96	1,648 00	480 00	1,640 00	
Fort Mason, Cal				156 83	182 50			445 80					
Fort Winfield Scott, Cal				152 50				287 35					
Alcatraz Island, Cal					182 50			634 40					
San Diego Barracks, Cal				138 00	178 00	26 20							
Fort Halleck, Nev				26 00	76 00			53 55					
Angel Island, Cal				646 00	189 50	44 45		61 60					
Fort Gaston, Cal				293 50	182 50	114 80		33 60		173 00			
Fort McDermitt, Nev				181 00	7 50		\$116 90	202 08					54 00
Fort Bidwell, Cal				437 50	54 00			57 40					
Benicia Barracks, Cal				231 50	128 00			25 90					
Total				2,936 83	1,363 00	185 45	116 90	2,636 44	13,609 96	1,821 00	480 00	1,640 00	54 00
Department of Arizona.													
Whipple Barracks, Prescott, Ariz.	64 70			1,006 10	92 50		21 35	234 94	9,019 96		1,336 00	2,301 00	560 67
Fort Huachuca, Ariz				348 55	40 50	26 95		337 65	1,333 30				351 00
Fort Thomas, Ariz				126 50	152 00	7 35		89 25					
Fort Apache, Ariz	8 00			678 25	112 54	101 85		419 25					19 25
Fort Lowell, Ariz	4 50			105 00		30 90		250 25					25 00

Fort McDowell, Ariz.				178 00	103 00			96 93					
Fort Grant, Ariz.	5 00			787 00		177 65		162 10					310 00
Fort Bowie, Ariz.	17 10					79 80		595 73	1,163 86				2,223 67
Fort Verde, Ariz.				41 25	162 50	73 85		136 10					100 00
Fort Mojave, Ariz.				10 50				314 40		29 05			1,313 00
San Carlos Agency, Ariz.					182 00				1,100 00				
Total	93 30			3,226 15	845 04	507 35	21 35	2,636 62	12,618 59	29 05	1,336 00	2,301 00	4,062 59
Department of the Columbia.													
Vancouver Barracks and Depot, Wash.	100 00	\$70 00		2,848 10	214 50	73 15		2,086 29	2,207 67	532 00	180 00		400 00
Portland, Oreg.				805 60	109 50	39 55		382 40	3,666 70		600 00		4 00
Fort Spokane, Wash.	5 00			87 50	214 00	105 40	42 70	267 80					
Fort Walla Walla, Wash.				422 50		108 15		195 20					
Boisé Barracks, Idaho.				272 00	182 50								
Fort Canby, Wash.			42 25	270 00	95 50			119 35					
Fort Townsend, Wash.				179 75	195 50	34 30		158 15					
Fort Klamath, Oreg.				84 50	132 00			182 35					
Fort Cœur d'Alene, Idaho.	2 50			552 28	262 50	127 75		545 70					
Seattle, in the field, Wash.					10 50								
Total	107 50	70 00	42 25	5,612 23	1,396 00	498 80	42 70	3,827 24	6,474 37	532 00	780 00		404 00
General depots.													
Washington, D. C.	10 00	2 25						14,653 44	2,579 50	1,174 00	3,125 00		
New York, N. Y.	32 00	3 50		298 20		117 25	95 55	21 70	16,367 21	870 50	1,204 56	1,414 00	
Philadelphia, Pa.				77 40					18,524 64	101 25	3,015 00		
Jeffersonville, Ind.	3 88		14 00						11,416 13	840 00	520 00	3,200 60	
San Francisco, Cal.	9 00								9,516 57	2,430 00	720 00	720 00	
Saint Louis, Mo.	20 80		18 20						9,350 45	952 90	1,425 00	477 75	300 00
Total	75 68	5 75	407 80			117 25	95 55	21 70	79,828 44	7,774 15	8,058 56	8,936 75	300 00
Independent posts.													
West Point, N. Y.				2,999 75	554 50	537 65		5,377 75	1,050 00				
Jefferson Barracks, Mo.				2,550 00	272 50	66 15		383 15	1,875 00	712 05			
Columbus Barracks, Ohio.				928 00	168 00	107 10	82 90	268 10	1,400 04				
David's Island, New York Harbor	3 52			1,393 81	182 50	213 15		587 49	1,599 96				
Hot Springs, Ark.									600 00		160 00	468 00	
Willet's Point, New York Harbor				1,215 00	307 00	81 85			218 94				
Kennebec Arsenal, Me.			5 86										
Frankford Arsenal, Pa.	11 00						95 20	32 20					
Indianapolis Arsenal, Ind.				24 20									
Augusta Arsenal, Ga.				23 97					349 99				
National Armory, Springfield, Mass.	20 00								300 00				
Watertown Arsenal, Mass.				13 20									
Atlanta, Ga.									1,599 90		480 00		
Total	34 52		67 23	9,086 56	1,484 50	1,005 90	178 10	6,648 69	8,993 89	712 05	640 00	468 00	

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department, &c.—Continued.

Division and post.	INCIDENTAL EXPENSES.												
	Civilian employes.									Horse and mule—		Inter-ments of officers.	Inter-ments of enlisted men.
	Wagon and forage master, United States Army.	Janitors.	Veteri-nary sur-geons.	Farriers.	Store-keepers.	Garden-ers.	Gate-keepers.	Agents and superinten-dents.	Draughts-men.	Shoes.	Shoe-nails.		
<i>Division of the Atlantic and Department of the East.</i>													
Headquarters, Governor's Island, N. Y. H.									\$1,333 30			\$4,301 67	
Baltimore, Md.													\$15 00
Boston, Mass.										\$3 90			
New Orleans, La.					\$900 00								
Saint Augustine and Saint Francis Bar-racks, Fla.													35 00
Washington Barracks, D. C.													20 00
Newport Barracks, Ky.			\$16 50										
Jackson Barracks, La.													10 00
Madison Barracks, N. Y.												1,830 50.	15 00
Little Rock Barracks, Ark.													15 00
Fort Monroe, Va.	\$808 50				418 00								8 00
Fort Barrancas, Fla.													30 00
Fort Adams, R. I.												75 00	
Fort Hamilton, N. Y. H.			30 00										
Fort Schuyler, N. Y. H.													10 00
Fort Columbus, N. Y. H.		\$840 00											
Fort Wayne, Mich.			6 00										
Fort Brady, Mich.													16 00
Fort Ontario, N. Y.												75,00	22 00
Total	808 50	840 00	52 50		1,318 00				1,333 30	3 90		6,282 17	196 00
<i>Division of the Missouri.</i>													
Headquarters, Chicago, Ill.		1,056 67	168 00							412 01	\$54 82		

Department of the Missouri.

Department of the Missouri.												
Headquarters and depot, Fort Leavenworth, Kans.		885 00		\$700 00	1,100 00			\$349 98	330 75	137 08	169 65	323 62
Military Prison, Fort Leavenworth, Kans.	609 96							300 00				
Fort Stanton, N. Mex.												10 00
Santa Fé, N. Mex.			12 00	157 80				42 00	43 20	27 47		921 50
Fort Hays, Kans.	421 23											17 00
Fort Riley, Kans.	875 50		28 90									
Fort Wingate, N. Mex.	60 00											
Fort Gibson, Ind. T.												9 00
Fort Supply, Ind. T.				361 67								
Total.	1,966 69	885 00	38 90	1,219 47	1,100 00			691 98	373 95	164 55	169 65	1,281 12

Department of the Platte.

Headquarters, fort, and depot, Omaha												
Nebr.....	67 90	400 00	39 00	450 00	1,166 70		873 33	1,559 96	218 20	193 82		42 00
Cheyenne Depot, Wyo.....			5 00		1,200 00					74 00		
Fort McKinney, Wyo.....	201 90										9 00	
Fort Sidney, Nebr.....											20 00	
Total.....	269 80	400 00	44 00	450 00	2,366 70		873 33	1,559 96	218 20	267 82		71 00

Department of Dakota.

Headquarters and post, Fort Snelling, Minn.		50 00	11 25									
Saint Paul, Minn.			30 00				143 33		235 07	95 70		
Helena, Mont.			16 50				300 00					
Fort Buford, Dak.							300 00					
Fort Ellis, Mont.											10 00	
Fort Custer, Mont.	740 60											
Fort Sisseton, Dak.											1 75	
Fort Sully, Dak.	21 00											
Total	761 60	50 00	57 75				743 33		235 07	95 70		11 75

Department of Texas.

Headquarters and depot, San Antonio, Tex	538 70	500 00	28 00	1,100 00	1,275 00	731 15	206 25	90 00
Camp Del Rio, Tex								
Total	538 70	500 00	28 00	1,100 00	1,275 00	731 15	206 25	90 00

Department of California.

[illegible]

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department, &c.—Continued.

Division and post.	INCIDENTAL EXPENSES.												
	Civilian employes.								Horse and mule—		Inter-ments of officers.	Inter-ments of enlisted men	
	Wagon and forage-masters, United States Army.	Janitors.	Veteri-nary sur-geons.	Farriers.	*Store-keepers.	Garden-ers.	Gate-keep-ers.	Agents and su-perin-tendents.	Draughts-men.	Shoes.			Shoe-nails.
<i>Department of California—Continued.</i>													
Fort Bidwell, Cal.....										\$25 00			
Total.....			\$160 00	\$1,800 00		\$1,527 50	\$945 00	\$150 00		25 00			\$75 00
<i>Department of Arizona.</i>													
Whipple Barracks, Prescott, Ariz.....					\$65 00			125 00		29 50	\$45 50		48 20
Fort Apache, Ariz.....								75 00					
Fort Lowell, Ariz.....								250 00					
Fort Bowie, Ariz.....					914 00								
San Carlos Agency, Ariz.....								700 00					
Total.....					979 00			1,150 00		29 50	45 50		48 20
<i>Department of the Columbia.</i>													
Vancouver Barracks and Depot, Wash....	\$808 50												
Portland, Oreg.....										61 60	184 20		
Fort Spokane, Wash.....								2 50					
Fort Walla Walla, Wash.....													10 00
Boise Barracks, Idaho.....											13 00		10 00
Total.....	808 50							2 50		61 60	197 20		20 00
<i>General depots.</i>													
Washington, D. C.....			2,476 00					450 00			229 03	\$75 00	10 00
New York, N. Y.....		\$150 00	527 25	23 50	116 06				\$133 33	4,577 14	1,171 31		35 00
Philadelphia, Pa.....													26 00
Jeffersonville, Ind.....				1 00	2,100 04	300 00		1,650 00		4,603 11	2,312 83		521 50

San Francisco, Cal.....	660 00			2,509 59			50 00		2,856 92	2,838 36	68 00	506 25
Saint Louis, Mo.....		216 00					900 00		7 50			
Total.....	810 00	3,219 25	24 50	4,816 29	300 00		3,050 00	133 33	12,044 67	6,551 53	143 00	1,098 75
<i>Independent posts.</i>												
West Point, N. Y.....									28 25			
Jefferson Barracks, Mo.....	606 60		1,440 00						16 00	9 12		10 00
Columbus Barracks, Ohio.....									3 75			20 00
Watertown Arsenal, Mass.....												25 00
Watervliet Arsenal, N. Y.....												30 00
Total.....	606 60		1,440 00						48 00	9 12		85 00

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department, &c.—Continued.

Division and post.	INCIDENTAL EXPENSES.											
	Appre- hension of desert- ers.	Sub- scription for news- papers, &c.	Office furniture.	Lawn- mowers.	Fire ap- paratus.	Disin- fectants.	Aff- davits.	Shoeing.	Targets.	Tele- phone and tele- graph.	Recov- ery of horses and mules.	All ex- penses not other- wise enumer- ated.
Division of the Atlantic and Department of the East.												
Headquarters, Governor's Island, N. Y. H.	\$360 00		\$77 00									\$47 00
Baltimore, Md.	210 00		117 95			\$22 50				\$82 50		77 21
Boston, Mass.	240 00	\$266 71	63 81			13 10		\$13 95				55 90
Buffalo, N. Y.	480 00		19 00			57 25						30 64
New Orleans, La.	30 45		37 15			72 50		28 80				190 80
Saint Augustine and Saint Francis Barracks, Fla.								109 00	\$22 96			33 00
Washington Barracks, D. C.	150 00		73 45			26 45			727 17			311 25
Newport Barracks, Ky.	60 00		2 90			24 01		65 85				
Jackson Barracks, La.						69 99		61 70				
Mount Vernon Barracks, Ala.						29 63		67 60				80 00
Madison Barracks, N. Y.	90 00							145 85	303 00			28 25
Plattsburg Barracks, N. Y.						17 50		28 00	59			155 90
Little Rock Barracks, Ark.	210 00								342 99			90 00
Fort Monroe, Va.	30 00					46 35			344 00	50 17		276 30
Fort McHenry, Md.								67 40	2 39			75 84
Fort Barrancas, Fla.	60 00							71 15	1 04		\$5 30	21 65
Fort Warren, Mass.						7 50		110 00				35 00
Fort Preble, Me.	90 00		2 00			7 92		14 75	38 65	1 21		11 15
Fort Trumbull, Conn.								55 25				36 50
Fort Adams, R. I.	90 00					37 50			3 95			76 00
Fort Hamilton, N. Y. H.									250 00			1 50
Fort Schuyler, N. Y. H.								218 01				
Fort Wadsworth, N. Y. H.						21 90		112 50	2 50			90 00
Fort Columbus, N. Y. H.			141 58						143 00	12 00		98 05
Fort Wayne, Mich.	240 00			\$2 50		46 50		160 25	7 03			4 50
Fort Brady, Mich.			12 50			10 00		90 04	52 00			
Fort Mackinac, Mich.									2 08			
Fort Porter, N. Y.	60 00							82 82				25 90
Fort Ontario, N. Y.						11 85		60 00	16 32			1 05
Fort Niagara, N. Y.						18 60		120 00	1,420 50	100 00		558 60
Total	2,400 45	266 71	547 34	2 50		541 05		1,682 92	3,705 17	254 90	5 80	2,411 99

Division of the Missouri.

Headquarters, Chicago, Ill.	984 90	53 40	458 86			\$20 25	683 73		785 86		271 39
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Department of the Missouri.

Headquarters and depot, Fort Leavenworth, Kans.	810 00		181 30	124 25	38 93	14 75	103 40	1,224 69	1,684 86	6 00	1,549 13
Military Prison, Fort Leavenworth, Kans.			167 00								606 20
Denver, Colo.	630 00		7 50					6 45			9 00
Fort Stanton, N. Mex.	30 00							1 33		455 00	3 00
Santa Fe, N. Mex.	540 00				111 50		135 68	2 40			69 66
Fort Reno, Ind. T.						12 25	33 00	3 60			110 75
Fort Sill, Ind. T.	90 00							2 64			79 79
Fort Bliss, Tex.								7 54	72 00		2 00
Fort Union, N. Mex.			3 60								158 90
Fort Hays, Kans.			3 00					7 56	9 00	10 00	10 00
Fort Riley, Kans.			35 00		41 67		89 00	2 60			47 48
Fort Selden, N. Mex.								2 87			
Fort Wingate, N. Mex.						21 00			100 00		45 50
Fort Gibson, Ind. T.	30 00							8 05		25 00	
Fort Lyon, Colo.	150 00							26 01	99 96		
Fort Lewis, Colo.	25 30					78 50		5 04			2 26
Fort Bayard, N. Mex.					27 50		20 15	31			2 31
Fort Elliott, Tex.						18 00		12			12 25
Fort Supply, Ind. T.	90 00					25 75	9 50	36			2 82
Uncompahgre Cantonment, Colo.	30 00										
Camp near Caldwell, Kans.							52 80				22 00
In the field						2 80	48 00				

Total	2,425 30		393 80	127 85	222 40	170 75	491 53	1,315 57	1,965 82	496 00	2,733 05
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Department of the Platte.

Headquarters, fort, and depot, Omaha, Nebr.	900 00		439 75		115 75			206 97	650 71	115 00	749 70
Cheyenne Depot, Wyo.							270 50		140 00		18 22
Ogden, Utah									96 00		
Fort McKinney, Wyo.							20 70	19 52	1,768 00		35 00
Fort Wabash, Wyo.								9 99	1,040 00		472 42
Fort Douglas, Utah					6 80			509 63	174 50		47 03
Fort Laramie, Wyo.					23 75		12 50	6 44	1,870 00		23 85
Fort Bridger, Wyo.								5 00			
Fort Sidney, Nebr.								3 70			
Fort Robinson, Nebr.						9 70			26 60		
Fort Niobrara, Nebr.									143 30	8 00	
Fort Fred Steele, Wyo.								1 20	240 00		
Fort D. A. Russell, Wyo.								5 52	96 00		72 00
Camp Date Creek, Butte, Wyo.							49 00				27 00
Evanston, in the field							9 00	18 84			

Total	900 00		439 75		146 30	9 70	361 70	786 81	6,245 11	123 00	1,445 27
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H. Ex. 1, pt 2—24

QUARTERMASTER-GENERAL.

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department, &c.—Continued.

Division and post.	INCIDENTAL EXPENSES.											
	Apprehension of deserters.	Subscription for newspapers, &c.	Office furniture.	Lawn-mowers.	Fire apparatus.	Disinfectants.	Affidavits.	Shoeing.	Targets.	Telephone and telegraph.	Recovery of horses and mules.	All expenses not otherwise enumerated.
Department of Dakota.												
Headquarters and post, Fort Snelling, Minn.	\$300 00	\$24 00					\$83 50		\$436 86	\$1,335 00		\$46 10
Saint Paul, Minn.	30 00		\$846 83			\$54 95		\$33 00		277 70		877 92
Helena, Mont.							2 00					
Bismarck, Dak.								12 37				
Fort Buford, Dak.	120 00						26 00		8 92			
Fort Missoula, Mont.									4 30	110 00		
Fort Yates, Dak.	120 00					18 75	8 50		3 35			17 00
Fort Assinniboine, Mont.							37 00		12 62		\$25 00	589 00
Fort Maginnis, Mont.	120 00						127 45	3 25	25 40		55 00	29 00
Fort Ellis, Mont.	60 00								4 40	72 00		20 70
Fort Meade, Dak.	85 00						13 95	15 75	14 18	100 00	200 00	
Fort Custer, Mont.	90 00						29 00	6 00	2 24			20 00
Fort Shaw, Mont.	150 00						16 00					109 25
Fort Keogh, Mont.	310 00				\$161 00		146 00		12 93		25 00	51 00
Fort Sisseton, Dak.	90 00											
Fort Pembina, Dak.									22 40			
Fort A. Lincoln, Dak.	30 00						20 00		11 99	26 67		
Fort Sully, Dak.	90 00											
Fort Totten, Dak.	132 00								4 02			
Camp Poplar River, Mont.							7 00		10 53			21 00
Total	1,727 00	24 00	846 83		161 00	73 70	516 40	70 37	574 14	1,921 37	305 00	1,780 97
Department of Texas.												
Headquarters and depot, San Antonio, Tex.	810 00		420 28			157 55	15 00	141 32	18 80	352 35	155 00	4,741 39
Fort Concho, Tex.									11 94			
Fort Davis, Tex.									6 00			6 00
Fort Brown, Tex.									5 20	54 00		
Fort Ringgold, Tex.									2 49			2 50
Fort McIntosh, Tex.										69 00		
Fort Stockton, Tex.	30 00								15 23			
Camp Pecos Colorado, Tex.									1 20			2 26
Camp Del Rio, Tex.								117 58				

Camp Rice, or Hancock, Tex.

							4 00			
Total	840 00	420 28		167 55	15 00	258 90	65 46	406 35	155 00	4,752 15
<i>Department of California.</i>										
Headquarters, Presidio of San Francisco, Cal.	1,320 00	1,064 13		\$5 06	\$1 00		\$237 00	\$1,578 45		\$979 72
Fort Mason, Cal.							\$15 00			20 00
Fort Winfield Scott, Cal.							21 25			70 00
Alcatraz Island, Cal.								50 00		
San Diego Barracks, Cal.						65 00	54			
Fort Halleck, Nev.						60 90				
Angel Island, Cal.	30 00						12 96			50 00
Fort Gaston, Cal.						58 50	1 49			
Fort McDermitt, Nev.						325 00				25 70
Fort Bidwell, Cal.	90 00					115 00		17 25	25 00	1 50
Benicia Barracks, Cal.	30 00					179 90				
Total	1,470 00	1,064 13		5 06	1 00	840 55	17 36	1,645 70	25 00	1,146 02
<i>Department of Arizona.</i>										
Whipple Barracks, Prescott, Ariz.	210 00			84 50	40 50	383 27	28 48	50 00	516 00	295 60
Fort Huachuca, Ariz.	60 00			4 50	11 50	5 00	5 17			
Fort Apache, Ariz.					4 00					
Fort Lowell, Ariz.	60 00						1 22			41 50
Fort Grant, Ariz.										
Fort Bowie, Ariz.		233 00				43 00	5 26			
Total	330 00	233 00		89 00	56 00	431 27	40 13	50 00	516 00	337 10
<i>Department of the Columbia.</i>										
Vancouver Barracks and Depot, Wash.		12 00	680 00	14 25	45 00	50		612 17		59 38
Portland, Oreg.	210 00		655 95	167 61	1 00		1 62	159 85		541 56
Fort Spokane, Wash.					3 00	33 90				
Fort Walla Walla, Wash.			107 82			22 50	50 47	70 00		
Boise Barracks, Idaho.							39 34	55 00		\$3 90
Fort Townsend, Wash.			2 50			91 60		39 90		
Fort Klamath, Oreg.						9 75	5 70			
Fort Coeur d'Alene, Idaho.						1 00	93			5 93
Seattle, in the field, Wash.										8 12
Total	210 00	12 00	1,446 27	181 86	49 00	159 25	98 06	936 92		698 89

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department, &c.—Continued.

Division and post.	INCIDENTAL EXPENSES.											
	Apprehension of deserters.	Subscription for newspapers, &c.	Office furniture.	Lawn-mowers.	Fire apparatus.	Disinfectants.	Affidavits.	Shoeing.	Targets.	Telephone and telegraph.	Recovery of horses and mules.	All expenses not otherwise enumerated.
<i>General depots.</i>												
Washington, D. C.	\$60 00	\$3,222 47					\$1 00	\$2 50		\$360 00		\$298 88
New York, N. Y.	120 00	6,330 23	\$524 30	\$43 91		\$218 92	29 75	121 25		309 30		8,118 03
Philadelphia, Pa.	150 00	32 98	69 48	104 30			7 00	85 25		330 00		451 97
Jeffersonville, Ind.			520 50			9 95		145 90		195 31		1,598 74
San Francisco, Cal.			1,404 67			741 54	17 00	114 00	\$50 25	866 65		3,573 84
Saint Louis, Mo.	570 00	15 60	110 75			48 40	21 50	131 48		197 38		206 67
Total	900 00	9,601 28	2,629 70	148 21		1,018 81	76 25	600 38	50 25	2,258 64		14,248 13
<i>Independent posts.</i>												
West Point, N. Y.	90 00		279 67				1 75			478 44		109 95
Jefferson Barracks, Mo.						30 00		10 80				666 85
Columbus Barracks, Ohio.	240 00					3 00		60 40		72 00		100 54
David's Island, New York Harbor			125 00				3 00	81 95				16 50
Willet's Point, New York Harbor									1 23			
Kennebec Arsenal, Me.							1 00					1 00
Frankford Arsenal, Pa.		50										
Augusta Arsenal, Ga.							75					
Fort A. Lincoln, Dak.								2 52				
Benicia Arsenal, Cal.							1 00	20 00				
Watertown Arsenal, Mass.												1 00
Watervliet Arsenal, N. Y.	30 00						1 75					14 35
Rock Island Arsenal, Ill.	30 00											36 45
Atlanta, Ga.								119 05				
Total	390 00	50	404 67			33 00	9 25	294 72	1 23	550 44		946 64

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department, &c.—Continued.

Division and post.	BARRACKS AND QUARTERS.										
	Rent of—					Commu- tation of quarters for enlisted men.	Public offices.		Printing.	Advertis- ing.	Purchase of tools
	Quarters for officers.	Quarters for enlisted men.	Public offices.	Store- houses.	Grounds for camps, posts, sta- bles, &c.		Construction.	Repair.			
<i>Division of the Atlantic and Department of the East.</i>											
Headquarters, Governor's Island, N. Y. H			\$24 60			\$3, 631 40	\$1, 059 00			\$272 16	
Baltimore, Md.			1, 086 00					\$28 70			
Boston, Mass.			1, 140 00					39 59			
Buffalo, N. Y.			718 66					348 88			\$19 96
New Orleans, La.			1, 730 00	\$1, 650 00			3, 000 00	3, 409 25		39 90	
Saint Augustine and Saint Francis Barracks, Fla.	\$32 00	\$168 00					48 50	841 39			
Washington Barracks, D. C.	156 85				\$35 00		483 00	11, 877 57		40 58	
Newport Barracks, Ky.							124 00	661 54			
Jackson, Barracks, La.								1, 077 26			
Mount Vernon Barracks, Ala.							1, 719 50	1, 000 00			
Madison Barracks, N. Y.		70 00			415 00		1, 107 12	1, 201 19			
Plattsburg Barracks, N. Y.								645 95			
Little Rock Barracks, Ark.	24 00	502 50		15 00	50 00		2, 939 00	1, 055 10		8 75	
Fort Monroe, Va.							1, 125 00	2, 227 37		25 65	
Fort McHenry, Md.					14 76			1, 808 20			5 68
Fort Barrancas, Fla.					106 67			993 50			
Fort Warren, Mass.								492 29			
Fort Preble, Me.					59 00			583 20			
Fort Trumbull, Conn.					25 00			1, 408 63			
Fort Adams, R. I.							567 00	11, 589 85		11 93	
Fort Hamilton, N. Y. H.							643 00	4, 005 94			
Fort Schuyler, N. Y. H.								854 00			
Fort Wadsworth, N. Y. H.							213 00	969 41			
Fort Columbus, N. Y. H.							405 00	2, 974 75			
Fort Wayne, Mich.								1, 261 36			12 15
Fort Brady, Mich.		110 00			50 00		809 00	607 00			
Fort Mackinac, Mich.				47 50				514 89			
Fort Porter, N. Y.			130 66					619 77			
Fort Ontario, N. Y.								1, 611 42			
Fort Niagara, N. Y.		50 00				70 00	7, 453 40	770 55			
Total	212 85	900 50	4, 829 32	1, 712 50	755 43	3, 701 40	21, 695 52	55, 478 55		398 97	37 79

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department, &c.—Continued.

Division and post.	BARRACKS AND QUARTERS.										
	Rent of—					Commu- tation of quarters for enlisted men.	Public offices.		Printing.	Advertis- ing.	Purchase of tools.
	Quarters for officers.	Quarters for enlisted men.	Public offices.	Store- houses.	Grounds for camps, posts, sta- bles, &c.		Construction.	Repair.			
<i>Division of the Missouri.</i>											
Headquarters, Chicago, Ill.....			\$14 820 00	\$2, 125 00	\$1 685 00	\$4, 321 64		\$108 49			\$8 50
<i>Department of the Missouri.</i>											
Headquarters and depot, Fort Leavenworth, Kans...	\$71 75	\$16 25	878 50	122 00	1 00	4, 348 73		12, 515 72			222 73
Military Prison, Fort Leavenworth, Kans.....								180 36			
Denver, Colo.....			720 00					898 74			50 20
Fort Stanton, N. Mex.....								916 39			
Santa Fé, N. Mex.....	25 00	757 33	413 00	180 00	554 00	1, 868 60		1, 532 00			
Fort Reno, Ind. T.....							\$1, 620 00	104 11			
Fort Sill, Ind. T.....		25 50						469 25			
Fort Bliss, Tex.....								643 62			33 28
Fort Union, N. Mex.....							301 10	47 20			
Fort Hays, Kans.....								9, 423 32			
Fort Riley, Kans.....			102 50	50 00				482 60			
Fort Selden, N. Mex.....		14 90						637 47			
Fort Wingate, N. Mex.....								494 00			
Fort Gibson, Ind. T.....								254 60			
Fort Lyon, Colo.....								3, 495 30			24 65
Fort Lewis, Colo.....								5, 900 00			3 00
Fort Bayard, N. Mex.....								382 00			
Fort Elliott, Tex.....					18 00			17, 216 92	1, 130 72		
Fort Supply, Ind. T.....									2, 093 45		
Uncompahgre Cantonment, Colo.....									324 58		
Camp near Caldwell, Kans.....		15 00	35 00	25 00	16 00						
Total.....	96 75	828 98	2, 149 00	377 00	589 00	6, 217 33	28, 915 32	32, 630 08			333 86
<i>Department of the Platte.</i>											
Headquarters, fort, and depot, Omaha, Nebr.....			3, 953 00	270 00	542 97	3, 024 90	1, 472 38	3, 312 77			41 65
Cheyenne Depot, Wyo.....			94 16					8, 668 20			
Ogden, Utah.....			255 00	45 00							

Fort McKinney, Wyo.....				25 50				2,688 95		
Fort Washakie, Wyo.....							927 00	578 20		
Fort Douglas, Utah.....	571 20	570 00	300 00				5,929 99	2,670 84		
Fort Laramie, Wyo.....							719 44	1,897 46		
Fort Sidney, Nebr.....							353 00	67 27		
Fort Niobrara, Nebr.....							630 00	144 15		
Fort Fred Steele, Wyo.....								359 20		
Fort D. A. Russell, Wyo.....							4,124 00			
Camp Date Creek, Butte, Wyo.....				25 00						
Evanston, in the field, Wyo.....		616 80								
Total.....	571 20	1,186 80	4,662 16	365 50	542 97	3,024 90	14,155 75	20,367 04		41 65
<i>Department of Dakota.</i>										
Headquarters and post, Fort Snelling, Minn.....						1,140 00		204 50		
Saint Paul, Minn.....					125 01		13,293 42	18,271 29	80 20	85 49
Helena, Mont.....			768 75		225 00			98 00		
Fort Missoula, Mont.....			500 00					22 00		
Fort Assiniboine, Mont.....								303 80		
Fort Maginnis, Mont.....								2,254 64		
Fort Meade, Dak.....							2,067 50			
Fort Custer, Mont.....				825 00			2,448 48	588 00		
Fort Shaw, Mont.....								1,635 56		
Fort Keogh, Mont.....								648 12		
Fort Sisseton, Dak.....							24 00			
Fort Pembina, Dak.....							46 00	813 67		
Total.....			1,268 75	825 00	350 01	1,140 00	17,901 40	24,817 58	\$80 20	85 49
<i>Department of Texas.</i>										
Headquarters and depot, San Antonio, Tex.....	1,963 16	461 20	1,075 00		5,480 11	4,812 66	6,504 18	6,944 64		11 03
Fort Clark, Tex.....							2,478 00	730 31		
Fort Concho, Tex.....		16 00						227 24		
Fort Davis, Tex.....							1,059 27	1,449 70		
Fort Brown, Tex.....							273 50			
Fort Ringgold, Tex.....			15 00	135 00			920 50			
Fort McIntosh, Tex.....								526 80		
Total.....	1,963 16	477 20	1,090 00	135 00	5,480 11	4,812 66	11,235 45	9,878 69		11 03
<i>Department of California.</i>										
Headquarters, Presidio of San Francisco, Cal.....	60 40				19 25	4,240 43	5,644 59	4,349 25		
Fort Mason, Cal.....								1,569 83		
Fort Winfield Scott, Cal.....							1,590 00	1,851 03	49 04	
Alcatraz Island, Cal.....							2,947 43	2,560 74		281 33
San Diego Barracks, Cal.....	2,214 26	8 00		120 00				384 25		
Angel Island, Cal.....							2 856 45	115 00		
Fort Gaston, Cal.....								346 00		
Fort McDermitt, Nev.....			207 50					193 46		

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department, &c.—Continued.

Division and post.	BARRACKS AND QUARTERS.										
	Rent of—					Comm- utation of quarters for enlisted men.	Public offices.		Printing.	Advertis- ing.	Purchase of tools.
	Quarters for officers.	Quarters for enlisted men.	Public offices.	Store- houses.	Grounds for camps, posts, sta- bles, &c.		Construction.	Repair.			
<i>Department of California—Continued.</i>											
Fort Bidwell, Cal.							\$220 50	\$930 80			
Benicia Barracks, Cal.								1,688 66			
Total	\$2,274 66	\$8 00	\$207 50	\$120 00	\$19 25	\$4,240 43	13,258 93	13,989 02		\$49 04	\$281 33
<i>Department of Arizona.</i>											
Whipple Barracks, Prescott, Ariz.			652 50	556 33		3,792 70	2,345 00	4,957 84	\$48 89	139 35	
Fort Huachuca, Ariz.			95 00				380 00	738 68			
Fort Thomas, Ariz.								139 00			
Fort Apache, Ariz.								28 50			
Fort Lowell, Ariz.		87 50	8 65	25 00	37 50			91 00			
Fort Grant, Ariz.							2,531 64	125 02			
Fort Bowie, Ariz.								30 00			
Total		87 50	756 15	581 33	37 50	3,792 70	5,256 64	6,110 04	48 89	139 35	
<i>Department of the Columbia.</i>											
Vancouver Barracks and Depot, Wash.			100 00		10 00	3,257 99	18,546 72	4,195 54			
Portland, Oreg.	18 00	40 00	690 00	370 00				3,934 97			
Fort Spokane, Wash.							522 00	1,178 00			
Fort Walla Walla, Wash.			102 50				1,607 68	2,197 11			
Boisé Barracks, Idaho.								781 40			
Fort Canby, Wash.	60 00							825 00			
Fort Townsend, Wash.								114 47			
Fort Klamath, Oreg.								412 92			
Fort Coeur d'Alene, Idaho.							866 22	440 90			
Seattle, in the field, Wash.	1,176 00	273 52									
Total	1,254 00	313 52	892 50	370 00	10 00	3,257 99	21,342 62	14,080 31			

<i>General depots.</i>										
Washington, D. C.					2,283 96	3,733 00	5,419 75	187 23		
New York, N. Y.	126 00	22,669 96			1,550 00	2,420 40	13,105 75	9,279 14	847 60	
Philadelphia, Pa.		938 00			333 86			2,596 16		
Jeffersonville, Ind.		220 00			110 00			5,172 89		40
San Francisco, Cal.		6,499 97	2,649 99			219 80	3,264 80	21,163 66		449 20
Saint Louis, Mo.		3,785 79	-3,700 00	1,100 00	1,247 84			3,151 07		
Total	126 00	34,113 72	6 349 99	5,377 32	7,620 54	21,790 30	41,550 05		847 60	449 60
<i>Independent posts.</i>										
West Point, N. Y.					1,004 50			16 00		
Jefferson Barracks, Mo.						208 00		7,171 84		
Columbus Barracks, Ohio.								2,615 94		15 23
David's Island, New York Harbor.	10 40			64 00		23,567 72		2,137 11	46 95	
Frankford Arsenal, Pa.	288 00									
Allegheny Arsenal, Pa.								62 80		
Atlanta, Ga.		300 00								
Total	288 00	10 40	300 00	64 00	1,004 50	23,775 72	12 003 69		46 95	15 23

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department, &c.—Continued.

Division and post.	BARRACKS AND QUARTERS.									HOSPITALS.					
	Mechanics.					Laborers.	Draughts- men.	Engi- neers.	Purchase of building (post- trader).	All expenses not otherwise enumer- ated.	Con- struction.	Repair.	Rent of build- ings for hospi- tals.	Ad- ver- tis- ing.	
	Carpen- ters.	Masons.	Plaster- ers.	Paint- ers.	Tin- ners.										
<i>Division of the Atlantic and Department of the East.</i>															
Headquarters, Governor's Island, N. Y. H.	\$28 50									\$21 00					
New Orleans, La.												\$34 27			
St. Augustine and St. Francis Barracks, Fla.												508 45			
Washington Barracks, D. C.												551 66			
Newport Barracks, Ky.										93 50	\$1,000 00	3,051 25		\$34 12	
Jackson Barracks, La.												291 00			
Mount Vernon Barracks, Ala.												289 00			
Madison Barracks, N. Y.												123 20			
Plattsburg Barracks, N. Y.												52 10			
Little Rock Barracks, Ark.											6,045 23			27 05	
Fort McHenry, Md.												1,001 29			
Fort Barrancas, Fla.												181 00			
Fort Warren, Mass.												188 00			
Fort Preble, Me.												85 93			
Fort Trumbull, Conn.												138 00			
Fort Adams, R. I.												395 00			
Fort Hamilton, N. Y. H.												1,771 20			
Fort Schuyler, N. Y. H.												517 00		95 20	
Fort Wadsworth, N. Y. H.											398 70	428 60			
Fort Columbus, N. Y. H.	900 00	\$68 00	\$480 00									75 00			
Fort Wayne, Mich.												155 07			
Fort Brady, Mich.												712 00			
Fort Mackinac, Mich.												19 60			
Fort Porter, N. Y.												186 00			
Fort Ontario, N. Y.												1,779 60		13 83	
Fort Niagara, N. Y.												37 05			
Total	928 50	68 00	480 00							114 50	7,443 93	12,501 17		170 20	
<i>Division of the Missouri.</i>															
Headquarters, Chicago, Ill.										84 00		9 99			

Headquarters and depot, Fort Leavenworth, Kans.

Fort Stanton, N. Mex.

Santa Fe, N. Mex.

Fort Reno, Ind. T.

Fort Sill, Ind. T.

Fort Bliss, Tex.

Fort Union, N. Mex.

Fort Hays, Kans.

Fort Riley, Kans.

Fort Selden, N. Mex.

Fort Wingate, N. Mex.

Fort Gibson, Ind. T.

Fort Lyon, Colo.

Fort Lewis, Colo.

Fort Bayard, N. Mex.

Fort Elliott, Tex.

Fort Supply, Ind. T.

Total .

Headquarters, fort, and depot, Omaha, Nebr.
Cheyenne Depot, Wyo.
Fort McKinney, Wyo.
Fort Washakie, Wyo.
Fort Douglas, Utah.
Fort Sidney, Nebr.
Fort Niobrara, Nebr.
Fort Fred Steele, Wyo.
Fort D. A. Russell, Wyo.

Total .

Headquarters and post, Fort Snelling, Minn.
 Saint Paul, Minn.
 Fort Missoula, Mont.
 Fort Yates, Dak.
 Fort Assiniboine, Mont.
 Fort Maginnis, Mont.
 Fort Meade, Dak.
 Fort Custer, Mont.
 Fort Shaw, Mont.
 Fort Sisseton, Dak.
 Fort Pembina, Dak.
 Fort A. Lincoln, Dak.

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department, &c.—Continued.

Division and post.	BARRACKS AND QUARTERS.										HOSPITALS.			
	Mechanics.					Laborers.	Draughts- men.	Engi- neers.	Purchase of building (post- trader).	All expenses not otherwise enumer- ated.	Con- struction.	Repair.	Rent of build- ings for hospi- tals.	Ad- ver- tis- ing.
	Carpen- ters.	Masons.	Plaster- ers.	Paint- ers.	Tin- ners.									
Department of Dakota—Continued.														
Fort Sully, Dak.....	\$132 00	\$52 50	\$133 00										\$63 00	
Fort Totten, Dak.....				\$75 00									259 90	
Fort Bennett, Dak.....														
Total	3,536 00	70 50	163 00	918 00				\$1,161 64		\$1,492 35	\$846 68	7,032 68		
Department of Texas.														
Headquarters and depot, San Antonio, Tex.	2,019 25			228 00						82 50	18,166 75	2,868 93		104 95
Fort Clark, Tex.....	963 00	506 00	31 50									131 60		
Fort Concho, Tex.....		32 50										198 96		
Fort Davis, Tex.....	16 00		80 00									389 00		
Fort Ringgold, Tex.....												10 00		
Fort McIntosh, Tex.....	422 50	149 00	242 00	99 00								134 50		
Fort Stockton, Tex.....												40 00		
Camp Pena Colorado, Tex.....												15 00		
Total	3,420 75	687 50	353 50	227 00						82 50	18,166 75	3,787 99		104 95
Department of California.														
Headquarters, Presidio of San Francisco, Cal.....	90 00	456 00		90 00			\$90 00			5 00		118 75		
Fort Mason, Cal.....												131 00		
Fort Winfield Scott, Cal.....														
Alcatraz Island, Cal.....	316 00									40 40		45 93		
San Diego Barracks, Cal.....												60 00	\$160 00	
Fort Halleck, Nev.....												125 00		
Fort Gaston, Cal.....						\$1,275 82						19 00		
Fort McDermitt, Nev.....												61 67		
Fort Bidwell, Cal.....										85 00		917 55		
Benicia Barracks, Cal.....												319 40		
Total	406 00	456 00		90 00		1,275 82	90 00			130 40		1,798 30	160 00	

Whipple Barracks, Prescott, Ariz.

Whipple Barracks, Prescott, Ariz.....	904 00	385 00								284 00	
Fort Huachuca, Ariz	434 00			\$16 00							
Fort Thomas, Ariz	144 00		148 00							99 00	
Fort Apache, Ariz.....	2,269 25	250 00						54 00			
Fort Lowell, Ariz.....	475 50										
Fort McDowell, Ariz.....		233 75	75 55							75 00	
Fort Grant, Ariz.....	2,887 74									166 00	
Fort Bowie, Ariz.....	1,856 00		152 00								
Fort Mojave, Ariz.....										60 00	
San Carlos Agency, Ariz.....	180 00										
Total.....	9,150 49	868 75	227 55	148 00	16 00			54 00		684 00	

Department of the Columbia.

Vancouver Barracks and Depot, Wash	435 00	125 00											465 95	
Portland, Oreg													25 56	
Fort Walla Walla, Wash											197 76			
Boise Barracks, Idaho													78 58	
Fort Canby, Wash													1,701 50	
Fort Townsend, Wash													115 50	
Fort Klamath, Oreg													16 14	
Fort Cœur d'Alene, Idaho												1,861 45	880 84	
Total	435 00	125 00									197 76	1,861 45	2,784 07	

General depots.

Washington, D. C.	1,505 00												
New York, N. Y.	91 00				220 00				372 64				
Philadelphia, Pa.	25 00		60 00						153 00				
Jeffersonville, Ind.			7 50						3 12				
San Francisco, Cal.	1,080 00								735 17		936 97		
Total	2,701 00		67 50		222 00				1,264 53		936 97		

Independent posts.

West Point, N. Y.											190 90
Jefferson Barracks, Mo.	156 00	180 00									4, 412 00
Columbus Barracks, Ohio.											205 62
David's Island, New York Harbor.								15 42	1, 528 10		14 50
Fort A. Lincoln, Dak.			70 00								253 00
Total	156 00	180 00	70 00					15 42	1, 528 10	5, 076 02	

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department, &c.—Continued.

Division and post.	HOSPITALS.				CAVALRY AND ARTILLERY HORSES.				
	Extra duty.			All ex- penses not other- wise enu- merated.	Purchase of cavalry.	Purchase of artillery.	Advertis- ing.	Inspector of horses.	All expenses not other- wise enumer- ated.
	Mechanics.	Laborers.	Carpenters.						
<i>Division of the Atlantic and Department of the East.</i>									
Baltimore, Md					\$862 50				
Fort Preble, Me.	\$7 00								
Total	7 00				862 50				
<i>Department of the Missouri.</i>									
Headquarters and depot, Leavenworth, Kans	18 00	\$5 61							
Fort Sill, Ind. T.	7 00								
Fort Union, N. Mex.	14 50	3 50							
Fort Hays, Kans	7 50								
Fort Supply, Ind. T.	14 50								
Total	61 50	9 11							
<i>Department of the Platte.</i>									
Headquarters, fort, and depot, Omaha, Nebr								\$1,800 00	\$105 00
<i>Department of Dakota.</i>									
Saint Paul, Minn.				\$11 90					
Fort Buford, Dak	\$69 00								
Fort Keogh, Mont.	28 00								
Fort Sisseton, Dak		\$136 85							
Fort Totten, Dak	17 00								
Total	114 00	136 85		11 90					
<i>Department of Texas.</i>									
Fort Clark, Tex.	33 40								

<i>Department of California.</i>								
Headquarters, Presidio of San Francisco, Cal.....				675 00		10 50		
Alcatraz Island, Cal.....			40					
Fort Gaston, Cal.....	63 00		8 30					
Total.....	63 00		8 70	675 00		10 50		
<i>Department of Arizona.</i>								
Whipple Barracks, Prescott, Ariz.....			15 00	11,502 50		9 00		14 00
<i>Department of the Columbia.</i>								
Boise Barracks, Idaho.....			9 52					
Fort Cœur d'Alene, Idaho.....	795 75	315 88	162 50	11 90				
Total.....	795 75	315 88	162 50	21 42				
<i>General depots.</i>								
Philadelphia, Pa.....			302 00					
San Francisco, Cal.....			27 40			72 60		
Saint Louis, Mo.....				106,794 73	4,679 30	172 35		2,146 90
Total.....			329 40	106,794 73	4,679 30	244 95		2,146 90
<i>Independent posts.</i>								
West Point, N. Y.....				1,833 00				
Jefferson Barracks, Mo.....				1,372 50		30 15		
Columbus Barracks, Ohio.....			9 10					
David's Island, New York Harbor.....			3 00					
Total.....			12 10	3,205 50		30 15		

A.—Statement showing in detail the amounts expended from the various appropriations made for the Quartermaster's Department, &c.—Continued.

Division and post.	CLOTHING.										
	Purchase of material.	Manufact- ure.	Repair.	Adver- tising.	Printing.	Clerks.	Inspect- ors and foreman.	Packers.	Mechan- ics.	Store- keepers.	All expenses not otherwise enumer- ated.
<i>Division of the Atlantic and Department of the East.</i>											
Washington Barracks, D. C.....			\$4 00								
Newport Barracks, Ky.....			6 00								\$2 25
Madison Barracks, N. Y.....			15 00								
Fort Barrancas, Fla.....	\$5 70										
Fort Brady, Mich.....			14 00								
Total.....	5 70		39 00								2 25
<i>Division of the Missouri.</i>											
Headquarters, Chicago, Ill.....	2,336 30										2,330 00
<i>Department of the Missouri.</i>											
Military Prison, Fort Leavenworth, Kans.....	210,984 66	\$29,041 12		\$185 25			\$3,549 95				427 73
Santa Fe, N. Mex.....	6 00										
Total.....	210,990 66	29,041 12		185 25			3,549 95				427 73
<i>Department of the Platte.</i>											
Cheyenne depot, Wyo.....											83 33
<i>Department of Dakota.</i>											
Headquarters and post, Fort Snelling, Minn.....			35 00								
Saint Paul, Minn.....		3 70									636 78
Helona, Mont.....		10 00									
Fort Buford, Dak.....			80 00								
Fort Missoula, Mont.....			60 69								
Fort Yates, Dak.....			33 50								
Fort Assiniboine, Mont.....			177 60								
Fort Maginnis, Mont.....											88 00
Fort Custer, Mont.....			70 00								
Fort Keogh, Mont.....			100 00								
Fort Sisseton, Dak.....			50 00								
Fort Pembina, Dak.....			50 00								
Fort Randall, Dak.....			25 00								
Fort A. Lincoln, Dak.....			10 00								
Fort Totten, Dak.....											
									400 75		

Camp Poplar River, Mont.		28 00								
Total	13 70	719 79					400 75		674 78	
<i>Department of Texas.</i>										
Headquarters and depot, San Antonio, Tex.									5 60	
<i>Department of the Columbia.</i>										
Vancouver Barracks and Depot, Wash.									458 33	
<i>General depots.</i>										
Washington, D. C.									3,922 25	
New York, N. Y.	1,618 50									
Philadelphia, Pa.	47,918 42	159,604 66	540 80	144 34	1,466 62	733 33	518 66	90 00	1,115 19	
Jeffersonville, Ind.	23,286 54	42,478 19		149 96	8,165 70	2,416 30	6,251 33	2,610 75	900 02	256 60
San Francisco, Cal.	261,345 30	50,544 04	303 30	48 80						1,852 67
Saint Louis, Mo.		1,863 32	33 80		1,616 62		2,917 49	455 00		2,218 87
Total	334,168 76	254,490 21	877 90	343 10	11,248 94	3,149 63	9,687 48	3,155 75	900 02	9,365 58
<i>Independent posts.</i>										
Columbus Barracks, Ohio										5 00
Willels Point, New York Harbor			57 00							
Total			57 00							5 00

RECAPITULATION.

Divisions, departments, general depots, and independent posts.	Regular supplies.	Incidental expenses.	Barracks and quarters.	Hospitals.	Cavalry and artillery horses.	Clothing.	Total.
Division of the Atlantic and Department of the East	\$143,481 93	\$71,158 59	\$91,313 83	\$20,122 30	\$862 50	\$46 95	\$326,986 10
Division of the Missouri	11,965 93	27,764 86	23,152 63	9 99		4,666 30	67,559 71
Department of the Missouri	493,590 98	78,471 50	78,051 55	11,923 21		244,194 71	906,231 95
Department of the Platte	337,587 57	60,768 92	45,177 97	2,275 78	1,905 00	83 33	447,798 57
Department of Dakota	478,463 89	70,444 56	53,809 92	8,142 11		1,809 02	612,669 50
Department of Texas	232,418 76	48,323 27	39,854 55	22,093 09		5 60	342,695 27
Department of California	130,577 25	35,741 80	36,896 38	2,030 00	685 50		205,930 93
Department of Arizona	361,987 81	32,850 07	27,274 89	699 00	11,525 50		434,337 27
Department of the Columbia	123,839 79	24,669 14	42,278 70	5,941 07		458 33	197,187 03
General depots	185,315 54	169,345 60	122,478 15	1,266 37	113,865 88	627,387 37	1,219,658 91
Independent posts	79,188 34	34,138 61	37,879 91	6,616 22	3,235 65	62 00	161,120 73
Total	2,578,417 79	653,876 92	598,168 48	81,119 14	132,080 03	878,713 61	4,922,175 97

A SUPPLEMENTAL.—Statement showing in detail amounts expended from the various appropriations made for the Quartermaster's Department for the fiscal year 1885, in the divisions, departments, and general depots of the Army, as shown by the accounts of officers from October 1, 1885, to June 30, 1886, not heretofore reported, not including appropriation "Army transportation."

Division and post.	REGULAR SUPPLIES.												
	Forage.				Fuel.		Stoves.		Advertising.	Printing.	Stationery.	Lamps and lanterns.	All expenses not otherwise enumerated.
	Hay	Oats.	Corn.	Barley.	Coal.	Wood.	Heating.	Cook.					
<i>Division of the Atlantic and Department of the East.</i>													
Fort Monroe, Va.							\$818 00						
Fort Adams, R. I.							1,700 00						
Fort Hamilton, N. Y. H.							1,295 00						
Fort Columbus, N. Y. H.							3,187 24	\$198 10					
Total							7,000 24	198 10					
<i>Department of the Missouri.</i>													
Fort Leavenworth, Kans.	\$29 80		\$5 60								\$217 47		
Military Prison, Fort Leavenworth, Kans.							548 26						
Santa Fe, N. Mex.	64 33					\$4 50							\$16 00
Fort Riley, Kans.													
Total	94 13		5 60			4 50	548 26				217 47		16 00
<i>Department of Dakota.</i>													
Saint Paul, Minn.											1,772 86		
<i>Department of California.</i>													
Headquarters, Presidio of San Francisco, Cal.							4 50				33 00		
<i>Department of the Columbia.</i>													
Fort Spokane, Wash. T.	19 99	\$38 07											
Fort Klamath, Oreg.	144 55			\$51 26									
Total	164 54	38 07		51 26									
<i>General depots.</i>													
Washington, D. C.	40 08		113 03	23 80	\$14 34	1 50			\$20 00	\$20 00			
New York, N. Y.											1,232 82	\$1,022 66	
Philadelphia, Pa.										83 75			
Jeffersonville, Ind.							3,326 70	\$12,329 99					139 56
San Francisco, Cal.											4,419 25		
Total	40 08		113 03	23 80	14 34	1 50	3,326 70	12,329 99	20 00	103 75	5,652 07	1,022 66	139 56

A SUPPLEMENTAL.—Statement showing in detail amounts expended from the various appropriations for the Quartermaster's Department, &c.—Continued

Division and post.	INCIDENTAL EXPENSES.					BARRACKS AND QUARTERS.			CAVALRY AND ARTIL- LERY HORSES.	HOSPITAL.	CLOTHING.		
	Shoeing.	Horse and mule shoes.	Deserters.	Internment of officers.	All expenses not otherwise enu- merated.	Construction.	Repairs.	Not otherwise enumerated.	Purchase.	Repairs.	Purchase.	Manufacture.	Advertising.
<i>Division of the Atlantic and Department of the East.</i>													
Madison Barracks, N. Y.....				\$98 00						\$398 44			
Fort Monroe, Va.....						\$5,665 90							
Fort Adams, R. I.....						9,773 12							
Fort Columbus, N. Y. H.....													
Fort Niagara, N. Y.....					\$1,438 22								
Total.....				98 00	1,438 22	15,339 02				398 44			
<i>Division of the Missouri.</i>													
Chicago, Ill.....					200 00								
<i>Department of the Missouri.</i>													
Fort Leavenworth, Kans.....								\$58 27					
Fort Stanton, N. Mex.....					52 09								
Fort Sill, Ind. T.....							\$354 64						
Fort Wingate, N. Mex.....						600 00							
<i>Department of Dakota.</i>													
Saint Paul, Minn.....					50 00		33 27						
Fort Buford, Dak.....			\$150 00										
<i>Department of California.</i>													
Headquarters, Presidio of San Francisco, Cal.....					8 50								
<i>Department of the Columbia.</i>													
Vancouver Barracks and Depot, Wash. T.....							1,985 00						

A SUPPLEMENTAL.—Statement showing in detail amounts expended from the various appropriations for the Quartermaster's Department, &c.—Continued.

Division and post.	INCIDENTAL EXPENSES.					BARRACKS AND QUARTERS,			CAVALRY AND ARTIL- LERY HORSES.	HOSPITAL.	CLOTHING.		
	Shoeing.	Horse and mule shoes.	Deserters.	Internment of officers.	All expenses not otherwise enu- merated.	Construction.	Repairs.	Not otherwise enumerated.	Purchase.	Repairs.	Purchase.	Manufacture.	Advertising.
<i>General depots.</i>													
Washington, D. C.....	\$2 00								\$500 00		\$2,966 28		
New York, N. Y.....											81,103 46		\$63 80
Philadelphia, Pa.....		\$1,898 37									6,833 32	\$12,069 37	
Jeffersonville, Ind.....													
Total.....	2 00	1,898 37							500 00		90,903 06	12,069 37	63 80
<i>Independent posts.</i>													
David's Island, N. Y. H.....							\$75 00						

RECAPITULATION.

Divisions, departments, general depots, and independent posts.	Regular supplies.	Incidental expenses.	Barracks and quarters.	Hospitals.	Horses.	Clothing.	Total.
Division of the Atlantic and Department of the East.....	\$7,198 34	\$1,536 22	\$15,339 02	\$398 44			\$24,472 02
Division of the Missouri.....		200 00					200 00
Department of the Missouri.....	885 96	52 09	1,012 91				1,950 96
Department of Dakota.....	1,772 86	200 00	33 27				2,006 13
Department of California.....	37 50	3 50					41 00
Department of the Columbia.....	253 87		1,985 00				2,238 87
General depots.....	22,787 48	1,900 37			\$500 00	\$103,036 23	125,224 08
Independent posts.....			75 00				75 00
Total.....	32,936 01	3,892 18	18,445 20	398 44	500 00	103,036 23	159,208 06

Statement showing the number of civilians employed by the month, and paid by the Quartermaster's Department, &c.—Continued.

DIVISION OF THE ATLANTIC AND DEPARTMENT OF THE EAST—Continued.

Divisions and posts.	Army transportaton.											
	Teamsters, \$20.	Launch Monroe.		Launch Barrancas.		Steam-tug General Wool.			Steamer Atlantic.			
		Pilot, \$75.	Engineer, \$80.	Engineer, \$90.	Pilot, \$60.	Assistant en- gineer, \$50.	Engineer, \$80.	Fireman, \$30.	Master, \$75.	Captain, \$116.66	Deck-hands, \$50	Engineer, \$80.
Headquarters, Governor's Island, N. Y	4					1	1	1	1	1	2	1
Fort Monroe, Va.		1	1									
Fort Adams, R. I.				1	1							
Fort Barrancas, Fla.												
Total	4	1	1	1	1	1	1	1	1	1	2	1

Divisions and posts.	Army transportation.									Barracks and quarters.			
	Steamer Atlantic.			Steamer Resolute.				Steam-launch Thayer.		Carpenters, \$60.	Painter, \$60.	Tinsmith, \$45.	
	Engineer, \$70.	Fireman, \$60.	Pilot, \$100.	Captain, \$116.66	Deck-hand, \$50.	Deck-hand, \$40.	Engineer, \$80.	Fireman, \$50.	Engineer, \$80.				Pilot, \$75.
Headquarters, Governor's Island, N. Y.	1	1	1	1	1	1	1	1	1	1	2	1	1
Fort Monroe, Va.	1	1	1	1	1	1	1	1	1	1	1	1	1
Boston, Mass.	1	1	1	1	1	1	1	1	1	1	1	1	1
Total	1	1	1	1	1	1	1	1	1	1	3	1	1

DIVISION OF THE PACIFIC AND DEPARTMENT OF CALIFORNIA.

Divisions and posts.	Regular supplies.													
	Coal inspector, \$106.66.	Forage-master, \$83.33.	Gatekeepers, \$35.	Gatekeepers, \$25.	Gatekeepers, \$15.	Gardeners, \$50.	Gardeners, \$35.	Printer, \$125.	Printer, \$90.	Printer, \$65.	Printer, \$70.	Printer, \$65.	Watchman, \$40.	Watchman, \$15.
Headquarters, Presidio of California. . .	1	1	3	2	2	3	2	1	1	1	1	1	1	1

Divisions and posts.	Incidental expenses.												
	Agent, \$75.	Clerk, \$150.	Clerk, \$133.33.	Clerk, \$116.66.	Clerk, \$100.	Copyist, \$75.	Laborer, \$80.	Laborers, \$35.	Messenger, \$40.	Telegraph operator, \$116.66.	Watchman, \$60.	Watchman, \$45.	Watchmen, \$15.
Headquarters, Presidio of California...	1	3	2	1	1	1	1	2	1	1	1	1	2

Statement showing the number of civilians employed by the month, and paid by the Quartermaster's Department, &c.—Continued.

DIVISION OF THE PACIFIC AND DEPARTMENT OF CALIFORNIA—Continued.

Divisions and posts.	Army transportation.										
	Blacksmith, \$100.	Blacksmith, \$90.	Blacksmith, \$60.	Blacksmith, \$45.	Cartmen, \$40.	Cook, \$40.	Deck-hand, \$75.	Engineer, \$90.	Hostler, \$90.	Hostler, \$40.	Mail-carrier, \$45.
Headquarters, Presidio of California...	1	1	1	1	3	1	1	1	1	1	1

Divisions and posts.	Army transportation.										
	Master-mechanic, \$133.33.	Packer, \$67.	Painter, \$90.	Plumber, \$75.	Saddler, \$65.	Superintendent of sewerage, \$90.	Train-master, \$75.	Transportation agent, \$100.	Transportation agent, \$50.	Transportation agent, \$40.	Teamster, \$90.
Headquarters, Presidio of California...	1	1	1	1	1	1	1	2	1	1	1
Fort Gaston.....		1									
Total.....	1	1	1	1	1	1	1	2	1	1	1

Divisions and posts.	Army transportation.										
	Teamster, \$55.	Teamster, \$50.	Teamsters, \$45.	Warehouseman, \$50.	Wheelwright, \$90.	Steamer McPherson.					
						Captain, \$133.33.	Engineer, \$125.	Firemen, \$80.	Mate, \$80.	Seamen, \$70.	Watchman, \$70.
Headquarters, Presidio of California...	1	4	10	1	1	1	1	2	1	3	1

Statement showing the number of civilians employed by the month, and paid by the Quartermaster's Department, &c.—Continued.

DEPARTMENT OF ARIZONA.

Divisions and posts.	Regular supplies.		Incidental expenses.									
	Printer, \$100.	Printer, \$80.	Clerks, \$150.	Clerks, \$133.33.	Clerks, \$116.63.	Clerks, \$100.	Interpreters, \$100.	Interpreter, \$75.	Interpreter, \$10.	Messenger, \$75.	Messenger, \$60.	Watchman, \$60.
Hdqrs. and depot, Whipple, Ariz	1	1	1	3	3		1			1	1	1
San Carlos, Ariz						1	1					
Fort Apache, Ariz							1	1				
Fort Bowie, Ariz			1			1						
Bowie Station, Ariz												
Fort Mojave, Ariz									1			
Total	1	1	2	3	3	2	2	1	1	1	1	1

Divisions and posts.	Army transportation.											
	Blacksmiths, \$100.	Blacksmith, \$75.	Blacksmith, \$60.	Cargadores, \$75.	Cook, \$50.	Corral-master, \$60.	Engineers, \$125.	Engineers, \$100.	Fireman, \$60.	Horler, \$50.	Packer, \$125.	Packers, \$50.
Hdqrs. and depot, Whipple, Ariz	2	1	1	1	1	1	1		1	1		
Fort Huachuca, Ariz	1											3
San Carlos, Ariz												2
Fort Apache, Ariz	1			1			1					
Fort Lowell, Ariz	1											
Fort Bowie, Ariz	1	1		3							1	32
Fort Thomas, Ariz	1											
Fort Grant, Ariz	1											
Fort Mojave, Ariz							1					
Fort McDowell, Ariz								1				
Fort Verde, Ariz								1				
Total	8	1	1	4	1	1	3	2	1	1	1	37

Divisions and posts.	Army transportation.										
	Painter, \$100.	Saddler, \$100.	Superintendent, \$133.33.	Superintendent, \$125.	Superintendent, \$100.	Transportation agents, \$125.	Transportation agents, \$100.	Transportation agent, \$60.	Transportation agents, \$30.	Teamsters, \$50.	Wheelerights, \$100.
Hdqrs. and depot, Whipple, Ariz.	1	1	1	1	.....	2	2	1	1	12	2
Fort Huachuca, Ariz.							1		1		1
San Carlos, Ariz.			1								
Fort Apache, Ariz.					2						1
Fort Bowie, Ariz.					4						1
Fort Grant, Ariz.											1
Total.	1	1	2	1	6	2	3	1	2	12	6

Statement showing the number of civilians employed by the month, and paid by the Quartermaster's Department, &c.—Continued.

DEPARTMENT OF THE COLUMBIA.

Divisions and posts.	Regular supplies.		Incidental expenses.						Army transportation.				
	Printer, \$100.	Printer, \$30.	Clerks, \$150.	Clerk, \$133.33.	Clerks, \$116.66.	Clerks, \$100.	Laborer, \$40.	Messengers, \$60.	Blacksmiths, \$80.	Blacksmiths, \$75.	Blacksmith, \$50.	Carpenter, \$80.	Corralmen, \$40.
Hdqs. and Fort Vancouver, Wash.	1	1	1	1	1	3	1	1	1	...	1	1	2
Portland, Oreg.			1		1	1		1					
Fort Spokane, Wash.										1			
Fort Cœur d'Alene, Idaho.										1			
Fort Walla Walla, Wash.													
Fort Klamath, Oreg.										1			
Total.....	1	1	2	1	2	4	1	2	2	3	1	1	2

Divisions and posts.	Army transportation.											
	Packer, chief, \$133.33.	Saddler, \$45.	Stable-master, \$60.	Stablemen, \$40.	Transportation agents, \$133.33.	Transportation agent, \$83.33.	Teamsters, \$40.	Warehouseman, \$83.33.	Watchman, \$60.	Wheelwrights, \$80.	Wheelwrights, \$75.	Steam-launch Dis-patch.
Hdqs. and Fort Vancouver, Wash.	1	1	1	3	1	...	10	1	1	2	...	1
Portland, Oreg.					1							1
Fort Spokane, Wash.							3			1	1	
Fort Cœur d'Alene, Idaho.							3			1	1	
Fort Walla Walla, Wash.						1	10			1		
Boisé Barracks, Idaho.							2					
Fort Klamath, Oreg.							2					
Total	1	1	1	3	2	1	30	1	1	5	2	1

DIVISION OF THE MISSOURI.

Divisions and posts.	Regular supplies.		Incidental expenses.							Army transportation.			
	Printer, \$100.	Pressman, \$65.	Clerks, \$150.	Clerks, \$133.33.	Clerk, \$116.66.	Janitor, \$75.	Messenger, \$75.	Messengers, \$60.	Watchman, \$60.	Foreman of stables, \$75.	Hostlers, \$60.	Transportation agent, \$116.66.	Teamsters, \$60.
• Headquarters, Chicago, Ill.	1	1	6	4	1	1	1	2	1	1	2	1	5

Statement showing the number of civilians employed by the month, and paid by the Quartermaster's Department, &c.—Continued.

DEPARTMENT OF THE MISSOURI.

Divisions and posts.	Regular supplies.										Incidental expenses.			
	Engineer, \$95.	Engineer, \$85.	Fireman, \$40.	Forage inspector, \$100.	Forage-masters, \$75.	Foreman, \$100.	Printer, \$95.	Printer, \$90.	Printer, \$60.	Printers, \$50.	Printer's laborer, \$40.	Clerks, \$150.	Clerks, \$133.33.	Clerks, \$116.66.
Headquarters and depot, Fort Leavenworth, Kans.	1	1	1	1	1	1	1	1	1	2	1	2	3	3
Military prison, Fort Leavenworth, Kans.					1	1							1	1
Denver, Colo.													1	1
Santa Fé, N. Mex.					1			1				1	1	1
Fort Reno, Ind. T.					1									
Fort Supply, Ind. T.					1									
Fort Sill, Ind. T.					1									
Fort Wingate, N. Mex.					1									
Fort Elliott, Tex.					1								1	
Fort Riley, Kans.														
Total	1	1	1	1	6	1	1	1	1	2	1	3	7	4

Divisions and posts.	Incidental expenses.										
	Guides, \$100.	Interpreters, \$100.	Interpreter, \$75.	Janitor, \$45.	Janitor, \$42.50.	Laborers, \$30.	Messenger, \$45.	Messenger, \$40.	Messenger, \$30.	Scout, \$60.	Storekeeper, \$100.
Headquarters and depot, Fort Leavenworth, Kans.				1	1	2	1				1
Denver, Colo.						2		1	1		1
Santa Fé, N. Mex.											
Fort Reno, Ind. T.		1									
Fort Supply, Ind. T.	1										
Fort Sill, Ind. T.		1									
Fort Wingate, N. Mex.			1								
Fort Bayard, N. Mex.	1								1		
Fort Selden, N. Mex.											
Total	2	2	1	1	1	4	1	1	1	1	1

Statement showing the number of civilians employed by the month, and paid by the Quartermaster's Department, &c.—Continued.

DEPARTMENT OF THE MISSOURI—Continued.

Divisions and posts.	Army transportation.													
	Farrier, \$50.	Blacksmith, \$70.	Blacksmiths, \$60.	Corral master, \$75.	Engineers, \$80.	Engineers, \$60.	Foreman, \$100.	Herder, \$40.	Hostlers, \$50.	Machinist, \$60.	Packers, \$60.	Packers, \$50.	Packers, \$40.	Saddlers, \$60.
Headquarters and depot, Fort Leavenworth, Kans.		1	1	1				1	3		2		3	
Military Prison, Fort Leavenworth, Kans.							1							
Santa Fé, N. Mex.														
Fort Reno, Ind. T.			1			1								1
Fort Supply, Ind. T.	1		1			1								1
Fort Sill, Ind. T.			1			1								
Fort Wingate, N. Mex.			1											1
Fort Elliott, Tex.			1											
Fort Riley, Kans.			1		1									
Fort Bayard, N. Mex.			2		1									
Uncompahgre Cantonment, Colo.			1			1								
Fort Stanton, N. Mex.			1											
Fort Union, N. Mex.			1							1				
Fort Gibson, Ind. T.			1											
Fort Lyon, Colo.			1			1								
Fort Lewis, Colo.			1											1
In the field, N. Mex.												3		
Total	1	1	15	1	2	5	1	1	3	1	2	3	3	4

Divisions and posts.	Army transportation.										Barracks and quarters.		Clothing and equipage.		
	Transportation agent, \$133.33.	Transportation agent, \$120.	Transportation agents, \$116.66.	Transportation agents, \$100.	Transportation agent, \$75.	Transportation agent, \$60.	Teamsters, 30.	Wagon-masters, \$60.	Wheelwrights, \$60.	Yard-master, \$80.	Carpenters, \$60.	Engineer, \$60.	Inspector, \$116.66.	Foreman, \$100.	Instructors, \$100.
Headquarters and depot, Fort Leavenworth, Kans.	1	1	2	3		1	11			1	2				
Military Prison, Fort Leavenworth, Kans.															
Santa Fé, N. Mex.				4	1		2							1	3
Fort Reno, Ind. T.							5	1	1						
Fort Supply, Ind. T.							4	1	1						
Fort Sill, Ind. T.							4	1	1						
Fort Wingate, N. Mex.							4	1	1						
Fort Elliott, Tex.							4	1	1						
Fort Bayard, N. Mex.							6	1	1						
Uncompahgre Cantonment, Colo.							3					1			
Fort Stanton, N. Mex.							11	1	1						
Fort Union, N. Mex.							3								
Fort Hays, Kans.							3								
Fort Gibson, Ind. T.							2								
Fort Lyon, Colo.							5								
Fort Lewis, Colo.							8	1	1						
Fort Bliss, Tex.							2								
Fort Selden, N. Mex.							2								
In the field, N. Mex.							2								
Total	1	1	2	7	1	1	77	5	8	1	2	1	1	1	3

Statement showing the number of civilians employed by the month, and paid by the Quartermaster's Department, &c.—Continued.

DEPARTMENT OF THE PLATTE.

Divisions and posts.	Regular supplies.							Incidental expenses.				
	Forage-master, \$133.33.	Forage-master, \$100.	Forage-master, \$70.	Forage-master, \$60.	Printer, \$80.	Printers, \$70.	Tinner, \$60.	Clerks, \$150.	Clerks, \$133.33.	Clerks, \$116.66.	Clerks, \$100.	Clerk, \$53.33.
Hdqs., fort, and depot, Omaha, Nebr...	1	1	....	1	1	2	....	3	4	2	2	1
Fort McKinney, Wyo.....	....	1	....	....	....	....	....	....	....	....	....	....
Cheyenne Depot, Wyo.....	....	....	1	....	....	....	1	1	....	1	....	....
Total.....	1	2	1	1	1	2	1	4	4	3	3	1

Divisions and posts.	Incidental expenses.										
	Guide, \$150.	Interpreter, \$60.	Janitor, \$50.	Laborer, \$45.	Laborer, \$40.	Laborer, \$35.	Messenger, \$75.	Messenger, \$60.	Porter, \$50.	Storekeeper, \$116.66.	Storekeeper, \$100.
Hdqs., fort, and depot, Omaha, Nebr...	....	....	1	1	1	10	1	1	1	1	....
Fort McKinney, Wyo.....	1	....	....	....	....	....	....	....	....	....	1
Fort Washakie, Wyo.....	....	1	....	....	....	4	....	....	....	....	....
Cheyenne Depot, Wyo.....	....	....	....	....	....	....	....	....	....	1	....
Fort Laramie, Wyo.....	....	....	....	....	....	....	....	....	....	....	....
Total.....	1	1	1	1	1	14	1	1	1	1	1

Divisions and posts.	Incidental expenses.						Army transportation.					
	Telegraph operator, \$75.	Telegraph operator, \$70.	Telegraph operator, \$20.	Telegraph operator, \$10.	Watchman, \$45.	Watchmen, \$35.	Blacksmiths, \$80.	Blacksmiths, \$75.	Blacksmith, \$70.	Blacksmith, \$50.	Corral master, \$75.	Engineers, \$80.
Hdqs., fort, and depot, Omaha, Nebr...	1	6	1	1	1	1	....	1
Fort McKinney, Wyo.....	1	1	....	....	....
Fort Washakie, Wyo.....	1	....	....	....	....
Cheyenne Depot, Wyo.....	1	....	....	....	....	2	1	1	....	1	....	1
Fort Douglas, Utah.....	1	....	....	....	....
Fort Laramie, Wyo.....	1	....	....	....	....	....	1	....	....	....	....
Fort Bridger, Wyo.....	1	....	....	....	....
Fort Sidney, Nebr.....	1	....	....	....	....
Fort Robinson, Nebr.....	1	....	....	....	1
Fort Niobrara, Nebr.....	1	....	....	....	....	1	....	....	....	....
Fort Fred Steele.....	1	....	....	....	....
Total.....	1	1	1	1	1	8	2	11	1	1	1	2

Statement showing the number of civilians employed by the month, and paid by the Quartermaster's Department, &c.—Continued.

DEPARTMENT OF THE PLATTE.

Divisions and posts.	Army transportation.										
	Herdsmen, \$35.	Hostlers, \$40.	Hostlers, \$35.	Packers, \$50.	Packers, \$40.	Packers, chief, \$133.33.	Painters, \$75.	Painters, \$60.	Saddlers, \$80.	Saddlers, \$75.	Superintendents, \$133.33.
Hdqrs., fort, and depot, Omaha, Nebr. ....	.....	.....	6	1	.....	.....	1	.....	1	.....	1
Fort McKinney, Wyo. ....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	2
Cheyenne Depot, Wyo.	3	1	.....	.....	2	1	.....	1	.....	1	2
Ogden, Utah. ....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1
Total	3	1	6	3	2	1	1	1	1	1	5

Divisions and posts.	Army transportation.								Barracks and quarters.	
	Transportation agents, \$100.	Transportation agents, \$83.33.	Transportation agents, \$70.	Teamsters \$40.	Teamsters, \$35.	Wagon masters, \$70.	Wheelwrights, \$83.33.	Wheelwrights, \$30.	Wheelwrights, \$75.	Wheelwrights, \$70.
Hdqrs., fort, and depot, Omaha, Nebr.	1	1	1	8	9	.....	1	.....	1	.....
Fort McKinney, Wyo. ....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Fort Washakie, Wyo. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cheyenne Depot, Wyo.	1	.....	1	5	.....	.....	.....	1	.....	.....
Fort Douglas, Utah. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Laramie, Wyo. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Bridger, Wyo. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Sidney, Nebr. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Robinson, Nebr. ....	.....	.....	.....	.....	.....	1	.....	.....	1	.....
Fort Niobrara, Nebr. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ogden, Utah. ....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Fort Fred Steele, Wyo. ....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Fort D. A. Russell, Wyo. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	2	2	2	13	25	1	1	1	10	2

Statement showing the number of civilians employed by the month, and paid by the Quartermaster's Department, &c.—Continued.

DEPARTMENT OF DAKOTA.

Divisions and posts.	Regular supplies.						Incidental expenses.							
	Engineers, \$125.	Engineers, \$75.	Engineers, \$55.	Forage-masters, \$60.	Printers, \$100.	Printers, \$80.	Clerks, \$150.	Clerks, \$133.33.	Clerks, \$100.	Clerks, \$83.33.	Copyists, \$75.	Interpreters, \$60.	Interpreters, \$50.	Janitors, \$50.
Hdqrs. and post, Fort Snelling, Minn.	1	1	1	1	1	1	5	1	1	1	1	1	1	1
Saint Paul, Minn.							1	2	1					
Fort Yates, Dak.										1			1	
Helena, Mont.							1							
Fort Custer, Mont.									1			1		
Fort Suaw, Mont.										1				
Fort Buford, Dak.				1						1			1	
Fort Assiniboine, Mont.										1		1		
Fort Keogh, Mont.													1	
Total	1	1	1	2	1	1	7	3	3	3	1	2	3	1

Divisions and posts.	Incidental expenses.								Army transportation.					
	Messengers, \$50.	Scavengers, \$40.	Scouts, \$125.	Scouts, \$60.	Scrubbers, \$35.	Scrubbers, \$10.	Telegraph operators, \$100.	Watchmen, \$40.	Watchmen, \$35.	Blacksmiths, \$83.33.	Blacksmiths, \$80.	Blacksmiths, \$75.	Blacksmiths, \$60.	Blacksmiths, \$50.
Hdqrs. and post, Fort Snelling, Minn.	1				1		1	1	1			1	2	
Saint Paul, Minn.	1					1								
Fort Missoula, Dak.										1			1	
Fort Yates, Dak.														
Helena, Mont.	1													
Fort Custer, Mont.			1							1			1	
Fort Maginnis, Mont.												1		
Fort Shaw, Mont.				1								1		
Fort Buford, Dak.											1			
Fort Assiniboine, Mont.		1									1			1
Fort Ellis, Mont.										1				
Fort Sisseton, Dak.													1	
Fort Randall, Dak.													1	
Fort Meade, Dak.													1	1
Fort Keogh, Mont.										1				
Fort A. Lincoln, Dak.													1	
Fort Pembina, Dak.													1	1
Fort Sully, Dak.													1	
Poplar River Camp, Mont.													1	
Fort Totten, Dak.												1		
Fort Bennett, Dak.														
Total	3	1	1	1	1	1	1	1	1	4	2	5	10	2

Statement showing the number of civilians employed by the month, and paid by the Quartermaster's Department, &c.—Continued.

DEPARTMENT OF DAKOTA—Continued.

Divisions and posts.	Army transportation.											
	Engineers, \$83.33.	Engineers, \$75.	Engineers, \$60.	Hostlers, \$35.	Packers, \$75.	Packers, \$60.	Packers, \$50.	Packers, \$40.	Plumbers' helpers, \$35.	Saddlers, \$60.	Saddlers, \$50.	Saddlers, \$40.
Hdqrs. and post, Fort Snelling, Minn.				1					1			
Saint Paul, Minn.							1	1				
Fort Missoula, Dak.	1									1		
Fort Yates, Dak.			1									
Fort Custer, Mont.			1		1							
Fort Maginnis, Mont.							1					
Fort Shaw, Mont.		1										
Fort Buford, Dak.												
Fort Assiniboine, Mont.						1				1		
Fort Ellis, Mont.						1				1		
Fort Keogh, Mont.												
Fort A. Lincoln, Dak.			1									
Fort Pembina, Dak.	1											
Total.....	2	1	3	1	1	2	2	1	1	3	1	1

Divisions and posts.	Army transportation.											
	Transportation agents, \$116.66.	Transportation agents, \$100.	Transportation agents, \$83.33.	Transportation agents, \$75.	Transportation agents, \$60.	Transportation agents, \$50.	Transportation agents, \$40.	Teamsters, \$50.	Teamsters, \$45.	Teamsters, \$40.	Teamsters, \$35.	Teamsters, \$30.
Hdqrs. and post, Fort Snelling, Minn.	2								2	3	13	
Saint Paul, Minn.	1	2	1	1			1					
Fort Missoula, Dak.										7		
Fort Yates, Dak.												
Helena, Mont.		1						1				
Fort Custer, Mont.		2										
Fort Maginnis, Mont.					1							
Fort Shaw, Mont.												
Fort Buford, Dak.										7		
Fort Assiniboine, Mont.				1							12	
Fort Ellis, Mont.										12	7	
Fort Sisseton, Dak.										4		
Fort Randall, Dak.												3
Fort Meade, Dak.		1									10	
Fort Keogh, Mont.		1									8	
Fort A. Lincoln, Dak.		1									7	
Bismarck, Dak.	1					1	1			1		
Fort Pembina, Dak.												3
Fort Sully, Dak.												6
Poplar River Camp, Mont.											4	
Fort Totten, Dak.												4
Fort Bennett, Dak.												2
Total.....	4	8	2	1	1	1	2	1	2	34	32	70

Statement showing the number of civilians employed by the month, and paid by the Quartermaster's Department, &c.—Continued.

DEPARTMENT OF DAKOTA—Continued.

Divisions and posts.	Army transportation.					Barracks and quarters.								
	Train-masters, \$50.	Wagon-master, \$50.	Wheelwrights, \$83.33.	Wheelwrights, \$75.	Wheelwrights, \$60.	Carpenters, \$100.	Carpenters, \$75.	Carpenters, \$60.	Engineers, \$83.33.	Engineers, \$80.	Engineers, \$75.	Foreman, \$45.	Painters, \$75.	Sawyer, \$60.
Hdqs. and post, Fort Snelling, Minn.					1	1	1						1	
Saint Paul, Minn.		1								1		1		
Fort Missoula, Dak.					1									
Fort Yates, Dak.														
Fort Custer, Mont.			1								1			1
Fort Maginnis, Mont.				1					1				1	
Fort Shaw, Mont.	1										1			
Fort Buford, Dak.				1		1		2						
Fort Assiniboine, Mont.					1									
Fort Ellis, Mont.										1				
Fort Randall, Dak.					1				1					
Fort Meade, Dak.					1		1							
Fort Keogh, Mont.			1											
Fort A. Lincoln, Dak.	1				1									
Fort Totten, Dak.							1							
Total.....	2	1	2	2	6	2	3	2	2	2	2	1	2	1

DEPARTMENT OF TEXAS.

Divisions and posts.	Regular supplies.							Incidental expenses.							
	Engineer, \$75.	Firemen, \$35.	Forage-masters, \$75.	Forage-masters, \$60.	Printer, \$100.	Printer, \$70.	Tinner, \$60.	Clerks, \$150.	Clerk, \$133.33.	Clerk, \$116.66.	Clerks, \$100.	Clerk, \$83.33.	Custodian, \$75.	Draughtsman, \$150.	Janitors, \$50.
Hdqs. and depot, San Antonio, Tex....	1	2		1	1	1	1	2	1	1	4	1	1	1	1
Fort Clark, Tex.....			1								1				
Fort Concho, Tex.....				1							1				
Fort Davis, Tex.....			1								1				
Fort Ringgold, Tex.....				1											
Fort McIntosh, Tex.....				1											
Total.....	1	2	2	4	1	1	1	2	1	1	7	1	1	1	1

Statement showing the number of civilians employed by the month, and paid by the Quartermaster's Department, &c.—Continued.

DEPARTMENT OF TEXAS—Continued.

Divisions and posts.	Incidental expenses.					Army transportation.							
	Laborers, \$30.	Messenger, \$50.	Messenger, \$45.	Storekeeper, \$100.	Watchmen, \$40.	Blacksmith, \$72.	Blacksmith, \$68.	Blacksmiths, \$60.	Blacksmith, \$52.	Corral-master, \$75.	Engineers, \$60.	Holders, \$30.	Packers, \$40.
Hdqrs. and depot, San Antonio, Tex....	13	1	1	1	6	1	1	1	1	1	1	3	4
Fort Clark, Tex.....	1							1			1		
Fort Concho, Tex.....								1			1		
Fort Davis, Tex.....								1			1		
Fort Ringgold, Tex.....								1			1		
Fort McIntosh, Tex.....								1			1		
Fort Stockton, Tex.....								1			1		
Fort Brown, Tex.....								1			1		
Fort Hancock, Tex.....								1			1		
Total.....	13	1	1	1	6	1	1	9	1	1	5	3	4

Divisions and posts.	Army transportation.							Barracks and quarters.	
	Saddlers, \$66.	Seavengers, \$40.	Transportation agent, \$133.33.	Transportation agent, \$116.66.	Transportation agents, \$100.	Teamsters, \$30.	Wagon-masters, \$60.	Wheelwright, \$72.	Wheelwright, \$60.
Hdqrs. and depot, San Antonio, Tex....	2	2	1	1	2	13	1	1	1
Fort Clark, Tex.....						3	1		1
Fort Concho, Tex.....						3	1		1
Fort Davis, Tex.....						3			1
Fort Ringgold, Tex.....						3			
Fort McIntosh, Tex.....						3			
Fort Stockton, Tex.....						3			
Fort Brown, Tex.....					1	1			
Camp Del Rio, Tex.....						1			
Camp Pena Colorado, Tex.....						1			
Fort Hancock, Tex.....						1			
Total.....	2	2	1	1	3	33	2	1	3

Statement showing the number of civilians employed by the month, and paid by the Quartermaster's Department, &c.—Continued.

GENERAL DEPOTS, AS PROVIDED BY ARMY REGULATIONS, 1823, AND SPECIAL ORDER 172, A. G. O., 1884.

Divisions and posts.	Regular supplies.		Incidental expenses.										
	Coal-heaver, \$60.	Forage inspect- or, \$83.33.	Clerks, \$150.	Clerks, \$133.33.	Clerks, \$116.66.	Clerks, \$100.	Clerks, \$83.33.	Clerks, \$75.	Copyists, \$83.33.	Copyist, \$80.	Copyists, \$75.	Copyist, \$60.	Gardener, \$50.
New York, N. Y.	1	.....	3	1	1	5	.....	.....	1	.....	.....	.....	.....
Philadelphia, Pa. ....	.....	1	5	3	4	.....	1	.....	.....	.....	1	.....	.....
Washington, D. C. ....	.....	.....	3	1	3	2	.....	1	.....	.....	1	.....	.....
Jeffersonville, Ind. ....	.....	.....	2	1	4	1	2	.....	.....	.....	1	.....	1
San Francisco, Cal. ....	.....	.....	1	2	1	.....	1	.....	1	.....	.....	.....	.....
Saint Louis, Mo. ....	.....	.....	1	2	1	.....	1	1	.....	.....	.....	.....	.....
Total.....	1	1	15	10	14	8	5	2	1	1	2	1	1

Divisions and posts.	Incidental expenses.												
	Janitor, \$60.	Laborers, \$60.	Laborers, \$45.	Laborer, \$40.	Laborers, \$35.	Laborer, \$25.	Messengers, \$75.	Messengers, \$60.	Messengers, \$45.	Messengers, \$40.	Scrubbers, \$30.	Storekeeper, \$133.33.	Store keepers, \$116.66.
New York, N. Y. ....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1
Philadelphia, Pa. ....	.....	.....	.....	.....	.....	.....	3	1	.....	.....	2	.....	.....
Washington, D. C. ....	.....	.....	.....	1	6	1	.....	1	.....	.....	.....	.....	.....
Jeffersonville, Ind. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	1
San Francisco, Cal.	1	3	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....
Saint Louis, Mo. ....	.....	.....	2	.....	.....	.....	.....	.....	2	1	.....	.....	.....
Total.....	1	3	2	1	6	1	3	4	2	3	2	1	2

Divisions and posts.	Incidental expenses.											
	Storekeeper, \$83.33.	Superintendent, \$150.	Superintendent, \$133.33.	Telephone operator, \$70.	Veterinary surgeon, \$100.	Watchmen, \$75.	Watchmen, \$60.	Watchman, \$52.	Watchman, \$50.	Watchmen, \$40.	Watchmen, \$35.	Warehouseman, \$100.
New York, N. Y. ....	.....	.....	.....	.....	.....	2	.....	.....	1	.....	.....	.....
Washington, D. C. ....	.....	1	1	.....	1	.....	3	.....	.....	.....	.....	.....
Jeffersonville, Ind. ....	.....	1	.....	.....	.....	.....	.....	.....	.....	6	.....	.....
San Francisco, Cal.	1	.....	.....	1	.....	.....	1	.....	.....	.....	.....	1
Saint Louis, Mo. ....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Total.....	1	3	1	1	1	2	4	1	1	6	4	1

Statement showing the number of civilians employed by the month, and paid by the Quartermaster's Department, &c.—Continued.

GENERAL DEPOTS, AS PROVIDED BY ARMY REGULATIONS, &c.—Continued.

[illegible]

Statement showing the number of civilians employed by the month, and paid by the Quartermaster's Department, &c.—Continued.

GENERAL DEPOTS, AS PROVIDED BY ARMY REGULATIONS, &c.—Continued.

Divisions and posts.	Clothing and equipage.													
	Carpenters, \$75.	Carpenter, \$65.	Clerks, \$150.	Clerks, \$133.33.	Clerk, \$116.66.	Clerks, \$100.	Clerks, \$83.33.	Clerk, \$75.	Cutters, \$75.	Engineer, \$100.	Fireman, \$60.	Folder, \$40.	Folders, \$75.	Foreman of packers, \$100.
Philadelphia, Pa.	1			1		1		1		1	1			
Jeffersonville, Ind.	1		1		1	1	1		2			1		
San Francisco, Cal.		1		1		1	1						4	
Saint Louis, Mo.														1
Total	2	1	2	2	1	2	3	1	2	1	1	1	4	1

Divisions and posts.	Clothing and equipage.													
	Foreman of packers, \$80.	Inspector, \$150.	Inspector, \$116.66.	Inspectors, \$100.	Inspector, \$83.33.	Laborers, \$45.	Marker, \$75.	Master baler, \$75.	Master packer, \$75.	Packer, \$90.	Packer, \$75.	Packer, \$70.	Packers, \$60.	Packers, \$54.
Philadelphia, Pa.		1		3			1	1	1				5	16
Jeffersonville, Ind.	1	1		1	1									
San Francisco, Cal.			1	1		2				1	1	1	7	
Saint Louis, Mo.														
Total	1	2	1	4	1	2	1	1	1	1	1	1	12	16

Divisions and posts.	Clothing and equipage.													
	Packer, \$52.	Packers, \$45.	Packers, \$40.	Sail-maker, \$75.	Storerooper, \$116.66.	Trimmer, \$75.	Trimmer, \$45.	Warehousemen, \$133.33.	Warehouseman, \$100.	Watchman, chief, \$35.	Watchmen, \$70.	Watchmen, \$60.	Watchman, \$52.50.	Workmen, \$54.
Philadelphia, Pa.						1		1		1	4	2		12
Jeffersonville, Ind.			10		1		1		1					
San Francisco, Cal.	1	4		1				1	1				1	
Saint Louis, Mo.														
Total	1	4	10	1	1	1	1	2	1	1	4	2	1	12

Statement showing the number of civilians employed by the month, and paid by the Quartermaster's Department, &c.—Continued.

INDEPENDENT POSTS.

Divisions and posts.	Incidental expenses.			Army transportation.		
	Clerk, \$100.	Clerk, \$31.25.	Clerk, \$25.	Transportation agent, \$83.33.	Teamster, \$45.	Teamster, \$30.
Springfield Armory, Mass			1			
Augusta Arsenal, Ga		1				
Benicia Arsenal, Cal				1	1	
Frankford Arsenal, Pa						1
Fort A. Lincoln Ordnance Depot, Dak	1					
West Point, N. Y						
Total	1	1	1	1	1	1

RECRUITING DEPOTS.

Divisions and posts.	Regular supplies: Engineer, \$75.	Incidental expenses.				Army transportation.				
		Clerk, \$150.	Clerk, \$133.33.	Clerk, \$116.66.	Farriers, \$120.	Engineer, \$80.	Steam-launch Hamilton.			
							Deck-hand, \$50.	Engineer, \$80.	Fireman, \$60.	Master, \$116.66.
Columbus Barracks, Ohio	1			1		1				
David's Island, N. Y			1			1	1	1	1	1
Jefferson Barracks, Mo		1			1					
Total	1	1	1	1	1	1	1	1	1	1

RECAPITULATION.

From what appropriation paid.	No. of employés.	Monthly pay.	Yearly pay.
<i>Division of the Atlantic and Department of the East.</i>			
Regular supplies	2	\$170 00	\$2,040 00
Incidental expenses	39	3,637 06	43,655 52
Army transportation	53	3,038 32	36,459 84
Barracks and quarters	5	285 00	3,420 00
Total	99	7,131 28	85,575 36
<i>Division of the Pacific and Department of California.</i>			
Regular supplies	21	1,094 99	13,139 88
Incidental expenses	18	1,904 98	18,059 76
Army transportation	52	3,308 66	39,703 92
Total	91	5,908 63	70,903 56
<i>Department of Arizona.</i>			
Regular supplies	2	180 00	2,160 00
Incidental expenses	17	1,729 97	20,759 64
Army transportation	98	7,066 66	84,799 92
Total	117	8,976 63	107,719 56

RECAPITULATION—Continued.

From what appropriation paid.	No. of employés.	Monthly pay.	Yearly pay.
<i>Department of the Columbia.</i>			
Regular supplies	2	\$180 00	\$2,160 00
Incidental expenses	12	1,226 65	14,719 80
Army transportation	59	3,276 65	39,319 80
Barracks and quarters	2	150 00	1,800 00
Total	75	4,833 30	57,999 60
<i>Division of the Missouri.</i>			
Regular supplies	2	165 00	1,980 00
Incidental expenses	16	1,879 98	22,559 76
Army transportation	9	611 66	7,339 92
Total	27	2,656 64	31,879 68
<i>Department of the Missouri.</i>			
Regular supplies	17	1,255 00	15,060 00
Incidental expenses	43	3,545 78	42,549 36
Army transportation	147	6,966 65	83,599 80
Barracks and quarters	3	180 00	2,160 00
Clothing and equipage	4	400 00	4,800 00
Total	214	12,347 43	148,169 16
<i>Department of the Platte.</i>			
Regular supplies	9	743 33	8,919 96
Incidental expenses	56	3,986 62	47,959 44
Army transportation	110	6,823 28	81,879 36
Barracks and quarters	4	210 00	2,520 00
Total	179	11,773 23	141,278 76
<i>Department of Dakota.</i>			
Regular supplies	7	555 00	6,660 00
Incidental expenses	35	3,084 98	37,019 76
Army transportation	225	11,039 93	132,479 16
Barracks and quarters	17	1,276 66	15,319 92
Total	284	15,956 57	191,478 84
<i>Department of Texas.</i>			
Regular supplies	12	765 00	9,180 00
Incidental expenses	37	2,433 32	29,199 84
Army transportation	76	3,680 99	44,171 88
Barracks and quarters	3	205 00	2,460 00
Total	128	7,084 31	85,011 72
<i>General depots.</i>			
Regular supplies	2	143 33	1,719 96
Incidental expenses	117	11,221 83	134,661 96
Army transportation	82	4,909 96	58,919 52
Barracks and quarters	7	550 00	6,600 00
Clothing and equipage	111	7,633 12	91,501 44
Total	319	24,450 24	293,402 88
<i>Independent posts.</i>			
Incidental expenses	3	156 25	1,875 00
Army transportation	3	158 33	1,899 96
Total	6	314 58	3,774 96
<i>Recruiting depots.</i>			
Regular supplies	1	75 00	900 00
Incidental expenses	4	519 99	6,239 88
Army transportation	5	386 06	4,639 92
Total	10	981 65	11,779 80
<i>Total amounts by appropriations.</i>			
Regular supplies	77	5,326 65	63,919 80
Incidental expenses	397	34,938 31	419,256 72
Barracks and quarters	41	2,856 08	34,279 92
Army transportation	919	51,267 75	615,213 00
Clothing and equipage	115	8,025 12	96,301 44
Total	1,549	102,414 49	1,228,973 88

In addition to the foregoing, contracts were made for services of teamsters, packers, pack-trains, &c., at—

Fort Stanton, N. Mex., Alfred Shaw, for packers and train between November 10, 1885, and June 30, 1886.....	\$2,258 00
Fort Wingate, N. Mex., S. Lowitzky, for packers and train between September 25, 1885, and June 30, 1886.....	3,835 05
Fort Wingate, N. Mex., G. B. Thomas, for packers and teamsters between November 5, 1885, and June 30, 1886.....	5,205 06
Fort Wingate, N. Mex., J. M. Scott, for teamsters between October 14, 1885, and June 30, 1886.....	1,052 50
Fort Bayard, N. Mex., B. W. Maguire, for packers and teamsters between September 19, 1885, and June 30, 1886.....	6,198 15
Fort Reno, Ind. T., J. Linton and J. Ease, for packers and teamsters between November 1, 1885, and June 30, 1886.....	6,371 10
Fort Supply, Ind. T., M. F. Weiglien and W. F. Murphy, for packers and teamsters between November 14, 1885, and June 30, 1886.....	3,105 20
Fort Sill, Ind. T., A. Hall and I. Chambers, for packers and teamsters between November 1, 1885, and June 30, 1886.....	3,734 67
Fort Elliott, Tex., S. Tien, for packers and teamsters between November 14, 1885, and June 30, 1886.....	3,105 20
Fort Lewis, Colo., John G. Price, for packers and teamsters between November 1, 1885, and June 30, 1886.....	4,531 88
Fort Riley, Kans., John Sheridan and others, for packers and teamsters between November 1, 1885, and June 30, 1886.....	4,764 13
Fort Thomas, Ariz., W. Eickhart, blacksmiths, cargadores, and packers between May 1, 1885, and June 30, 1886.....	1,306 67
Fort Whipple Barracks, Ariz., Hervey, Carlyle and others, manning pack-train between July 1, 1885, and June 30, 1886.....	65,617 66
Total.....	111,085 27

C.—Number of money accounts and returns of quartermaster's stores on hand at the commencement of the fiscal year, the number received and the number examined during the year, and the number remaining on hand unexamined at the close of the year.

	Calendar year.			Total.
	1884.	1885.	1886.	
Money accounts:				
On hand July 1, 1885.....	55	906		961
Received during the year.....	35	1,870	1,093	2,998
Total.....	90	2,776	1,093	3,959
Examined during the year.....	90	2,749	15	2,854
Remaining on hand July 1, 1886.....		27	1,078	1,105
Return of quartermaster's stores:				
On hand July 1, 1885.....	262	732		994
Received during the year.....	40	2,401	799	3,240
Total.....	302	3,133	799	4,234
Examined during the year.....	302	2,906	19	3,227
Remaining on hand July 1, 1886.....		227	780	1,007

Statement showing the amounts expended by officers of the Quartermaster's Department during, and on account of the appropriations for, the fiscal year ended June 30, 1886, and balances in their hands so far as shown by accounts received at this office.

Names of officers.	Expenditures.	Balances.
Atwood, E. B., captain and assistant quartermaster	\$178,613 01	\$9,865 02
Augur, J. A., captain Fifth Cavalry	1,833 00	
Andrews, H. M., lieutenant First Artillery	7,320 77	
Augur, A. A., lieutenant Twenty-fourth Infantry	2,018 19	
Ames, R. F., lieutenant Eighth Infantry	1,649 01	
Andrews, George, lieutenant Twenty-fifth Infantry	24,392 14	449 00
Anderson, J., lieutenant Eighteenth Infantry	3,347 67	
Ayer, W. E., lieutenant Twelfth Infantry	7,162 16	
Abercrombie, W. R., lieutenant Second Infantry	216 00	
Anderson, H. R., lieutenant Fourth Artillery	302 94	
Allen, H. T., lieutenant Second Cavalry	400 00	
Ayers, J. C., captain Ordnance Department	2,611 42	273 27
Almy, W. E., lieutenant Fifth Cavalry	2,248 16	917 44
Anglum, D. F., lieutenant Twelfth Infantry	458 28	
Bingham, J. D., colonel, assistant quartermaster-general	64,387 52	
Batchelder, R. N., lieutenant-colonel, deputy quartermaster-general	210,829 31	7,817 19
Batchelder, R. N., lieutenant-colonel and deputy quartermaster-general, Signal Service account	146,716 02	21,041 18
Belcher, J. H., major and quartermaster	83,648 90	3,773 82
Barnett, C. R., captain and assistant quartermaster	202,010 39	9,287 72
Bird, C., captain and assistant quartermaster	149,262 31	1,070 19
Booth, C. A., captain and assistant quartermaster	44,259 21	622 10
Baker, F., lieutenant Ordnance Department	3,942 52	6 75
Barrett, A., captain and military storekeeper	82,375 82	24,629 35
Bryant, C., captain Ordnance Department	1,215 26	
Best, C. L., jr., lieutenant First Artillery	6,920 39	
Blauvelt, W. F., lieutenant Fifteenth Infantry	8,818 49	91 01
Brush, D. H., lieutenant Seventeenth Infantry	9,240 74	135 45
Brown, G. Le Roy, lieutenant Eleventh Infantry	4,160 71	447 66
Burbank, C. S., lieutenant Tenth Infantry	5,349 98	
Baldwin, J. H., lieutenant Eighteenth Infantry	3,423 05	
Brown, E. H., lieutenant Fourth Infantry	2,271 17	
Benham, H. H., lieutenant Second Infantry	995 73	
Barry, T. H., lieutenant First Infantry	9,046 49	64 63
Benjamin, E. E., lieutenant First Infantry	843 14	
Bingham, G. S., lieutenant Ninth Cavalry	9,565 62	
Booth, C. A., lieutenant Seventh Infantry	67 00	
Bellinger, J. B., lieutenant Fifth Cavalry	643 03	
Bailey, H. K., lieutenant Fifth Infantry	1,146 14	
Benton, E. S., lieutenant Third Artillery	296 15	30 57
Byrne, C., lieutenant Sixth Infantry	3,271 91	3,032 94
Burnham, W. P., lieutenant Sixth Infantry	73 50	
Brant, L. P., lieutenant First Infantry		47 50
Campbell, L. E., captain and assistant quartermaster	551,793 40	26,599 43
Cook, G. H., captain and assistant quartermaster	47,530 47	15,662 50
Clem, J. L., captain and assistant quartermaster	7,072 38	1,572 25
Clark, D. H., lieutenant Fifteenth Infantry	15,905 05	111 70
Cornish, G. A., lieutenant Fifteenth Infantry	1,226 88	
Cook, L. W., lieutenant Third Infantry	911 05	
Collins, C. L., lieutenant Twenty-fourth Infantry	11,317 39	143 26
Campbell, P., lieutenant Eighteenth Infantry	2,812 81	
Cranston, J. R., lieutenant Tenth Infantry	4,892 02	23 15
Carter, W. H., lieutenant Sixth Cavalry	31,881 86	978 35
Clagett, J. R., lieutenant Twenty-third Infantry	5,613 75	114 88
Crawford, M., lieutenant Second Artillery	7,000 09	591 56
Carland, J., lieutenant Sixth Infantry	14,429 87	149 63
Chamberlin, L. A., lieutenant First Artillery	6,489 96	9,088 50
Clark, S. E., lieutenant Second Infantry	14,777 76	185 00
Cammins, A. S., lieutenant Fourth Artillery	3,045 88	
Connolly, T., lieutenant First Infantry	3,498 06	14 93
Carrington, F. D. L., lieutenant First Infantry	90 90	
Carpenter, W. L., lieutenant Ninth Infantry	991 59	
Coffin, W. H., lieutenant Fifth Artillery	246 55	
Clague, J. J., captain Subsistence Department	40,315 99	
Crittenden, J. J., lieutenant Twenty-second Infantry	711 96	
Carr, E. A., colonel Sixth Cavalry	97 97	
Corman, D., lieutenant Twenty-first Infantry		112 83
Curtis, A. F., lieutenant Second Artillery	1,103 91	1,220 00
Dandy, G. B., major and quartermaster	375,953 00	20,505 44
Duggan, W. T., lieutenant Tenth Infantry	2,197 81	
Dugan, T. B., lieutenant Third Cavalry	309 41	
Duncan, J. W., lieutenant Twenty-first Infantry	291 55	
Duff, R. J., lieutenant Eighth Cavalry	434 95	99 93
Danes, H. C., lieutenant Third Artillery	77 13	22 87
Earnest, C. A., lieutenant Eighth Infantry	8,452 89	
Earle, R. T., lieutenant Second Infantry	7,107 37	
Foster, C. W., major and quartermaster	307,548 34	50,020 25

Amounts expended by officers of the Quartermaster's Department, &c.—Continued.

Names of officers.	Expenditures.	Balances.
Furey, J. V., captain and assistant quartermaster.....	\$84,266 93	
Forsyth, L. C., captain and assistant quartermaster.....	40,783 82	\$1,655 79
Floyd, D. H., captain and assistant quartermaster.....	6,120 16	
Flagler, D. W., lieutenant-colonel Ordnance Department.....	3,731 79	
Farley, J. P., major Ordnance Department.....	180 27	
Forbes, T. F., lieutenant Fifth Infantry.....	3,002 59	
Foster, F. W., lieutenant Fifth Cavalry.....	10,160 45	
French, J. T., jr., lieutenant Fourth Artillery.....	1,737 73	8 93
Fuger, F., lieutenant Fourth Artillery.....	21,933 73	395 00
Febiger, L., lieutenant Twenty-third Infantry.....	3,654 18	
French, F. H., lieutenant Nineteenth Infantry.....	2,821 73	
Flynn, W. F., lieutenant Eighth Cavalry.....	2,306 05	
Freeman, S. D., lieutenant Tenth Cavalry.....	5,087 61	1,055 63
Fletcher, R. H., lieutenant Twenty-first Infantry.....	2,176 62	
Fowler, C. S., lieutenant Nineteenth Infantry.....	1,855 24	
Finley, L., lieutenant Tenth Cavalry.....	40 00	100 00
Faison, S. L., lieutenant First Infantry.....	122 20	
Fish, W., lieutenant Fourth Artillery.....	27 25	88 75
Gilliss, J., major and quartermaster.....	20,103 35	19,565 26
Grealish, M. J., captain Ordnance Department.....	1,857 34	
Gerlach, W., lieutenant Third Infantry.....	8,814 69	
Gilman, B. H., lieutenant Thirteenth Infantry.....	20,871 25	589 73
Gifford, J. H., lieutenant Second Artillery.....	14,138 67	50
Guard, A. McC., lieutenant Nineteenth Infantry.....	887 60	
Godwin, E. A., lieutenant Eighth Cavalry.....	2,980 33	84 65
Gill, W. H., captain and military storekeeper.....	130,455 77	
Greene, L. D., lieutenant Seventh Infantry.....	1,601 23	104 64
Gardener, C., lieutenant Nineteenth Infantry.....	7,043 46	66 91
Green, J. O., lieutenant Twenty-fifth Infantry.....	2,418 77	574 45
Goodwin, W. P., lieutenant Fourteenth Infantry.....	965 01	
Gustin, J. H., lieutenant Fourteenth Infantry.....	2,073 26	
Geary, W., lieutenant Nineteenth Infantry.....	43 75	4 49
Goodale, G. A., captain Twenty-third Infantry.....	175 25	75 25
Hodges, H. C., lieutenant-colonel and deputy quartermaster-general.....	499,508 52	37,621 21
Hughes, W. B., major and quartermaster.....	11,677 98	
Humphrey, C. F., captain and assistant quartermaster.....	85,839 58	12,346 07
Hathaway, F. H., captain and assistant quartermaster.....	113,473 65	398 94
Haynsworth, H. J., captain and assistant quartermaster.....	3,364 17	16,287 67
Heath, F., captain Ordnance Department.....	2,080 65	
Hoyt, C. H., captain and assistant quartermaster.....	2,005 84	
Hubert, E., lieutenant Eighth Infantry.....	1,535 03	
Huston, J. F., lieutenant Twentieth Infantry.....	16,499 23	204 84
Hoyt, R. W., lieutenant Eleventh Infantry.....	2,091 68	
Hodges, C. L., lieutenant Twenty-fifth Infantry.....	8,327 08	39 90
Hall, W. P., lieutenant Fifth Cavalry.....	2,056 93	
Hoyt, G. S., lieutenant Eighteenth Infantry.....	9,990 24	40 32
Hughes, W. N., lieutenant Thirteenth Infantry.....	2,584 50	11 25
Hay, C., lieutenant Twenty-third Infantry.....	6,426 80	
Hobbs, C. W., lieutenant Third Artillery.....	10,631 87	
Hardie, F. H., lieutenant Third Cavalry.....	12,705 59	200 00
Heard, J. W., lieutenant Third Cavalry.....	1,277 11	
Hunter, G. K., lieutenant Third Cavalry.....	532 10	
Hardin, E. E., lieutenant Seventh Infantry.....	8,444 17	778 61
Hamilton, W. R., lieutenant Fifth Artillery.....	134 48	
Hoppin, C. B., lieutenant Second Cavalry.....	6,426 40	
Hoskins, J. D. C., lieutenant Third Artillery.....	7,223 05	
Haden, J. J., lieutenant Eighth Infantry.....	2,347 38	
Hearn, L. J., lieutenant Twenty-first Infantry.....	3,087 38	
Holbrook, W. A., lieutenant First Cavalry.....	2,197 44	
Heistand, H. O. S., lieutenant Eleventh Infantry.....	4,893 02	71 46
Hovey, H. W., lieutenant Twenty-fourth Infantry.....	9,809 50	543 83
Hyde, J. Mc E., lieutenant Eighth Infantry.....	2,915 60	
Hall, C. B., lieutenant Nineteenth Infantry.....		190 84
Ingalls, C. H., captain and assistant quartermaster.....	6,579 80	212 93
Ives, E. B., lieutenant Nineteenth Infantry.....	217 65	
Jacobs, J. W., captain and assistant quartermaster.....	29,071 03	201 58
Jones, F. B., lieutenant Twenty-second Infantry.....	1,050 00	
Johnston, J. A., lieutenant Eighth Cavalry.....	492 05	
Kirk, E. B., major and quartermaster.....	47,680 47	4,736 40
Kimball, A. S., major and quartermaster.....	98,525 12	45,573 64
Krug, F. V., lieutenant Eighth Infantry.....	3,906 37	
Knight, J. T., lieutenant Third Cavalry.....	1,436 47	
Ludington, M. I., lieutenant-colonel and deputy quartermaster-general.....	430,249 68	45,204 87
Lee, J. G. C., major and quartermaster.....	281,737 11	285 60
Lord, J. H., captain and assistant quartermaster.....	82,321 92	
Lusk, J. L., lieutenant Engineer Corps.....	2,893 78	
Lynch, E., lieutenant Eighth Infantry.....	1,415 81	
Leary, P. J., lieutenant Fourth Artillery.....	1,74 54	
Lassiter, W., lieutenant Sixteenth Infantry.....	7,783 20	144 20
Lott, G. G., lieutenant Eleventh Infantry.....	2,716 17	

Amounts expended by officers of the Quartermaster's Department, &c.—Continued.

Names of officers.	Expenditures.	Balances.
Leeffe, J. G., lieutenant Nineteenth Infantry	\$2,485 19	
Moore, J. M., lieutenant-colonel and deputy quartermaster-general	18,784 31	\$42,307 69
McGonnigle, A. J., major and quartermaster	440,484 28	35,403 84
Marshall, J. M., captain and assistant quartermaster	45,069 41	4,174 44
Miltimore, A. E., captain and assistant quartermaster	42,073 06	
McCanley, C. A. H., captain and assistant quartermaster	58,158 77	1,464 55
Metcalfe, H., captain Ordnance Department	1,489 53	
Morgan, A. S. M., captain Ordnance Department	943 96	13 69
Myer, A. L., lieutenant Eleventh Infantry	1,980 50	3 00
McGunnegle, G. K., lieutenant Fifteenth Infantry	4,577 26	75 18
Miller, W. H., lieutenant First Cavalry	29,075 78	936 28
Mills, F. H., lieutenant Twenty-fourth Infantry	38,623 60	355 23
McCarthy, D. E., lieutenant Twelfth Infantry	63 20	
McFarland, W. C., lieutenant Sixteenth Infantry	3,154 08	89 30
McAnaney, W. D., lieutenant Ninth Cavalry	108 50	
McDonald, J. B., lieutenant Tenth Cavalry	14,209 45	163 80
Markland, M., lieutenant First Infantry	389 40	
Morrison, C. C., lieutenant Ordnance Department	1,218 07	
McClellan, J., lieutenant Fifth Artillery	2,921 68	40 29
Muhlenberg, W. C., lieutenant Second Infantry	2,890 90	
Mason, J. S., jr., lieutenant First Infantry	1,260 32	1 50
Maxon, M. M., lieutenant Tenth Cavalry	12,491 57	900 50
Morgan, J. L., United States consul-general ad interim, City of Mexico	592 44	
Mumford, T. S., lieutenant Thirteenth Infantry	3,448 52	
Morgan, G. H., lieutenant Third Cavalry	881 85	36 55
McCrea, T., captain First Artillery	511 03	503 00
Niles, L., lieutenant Second Artillery	64 04	
Newton, J., lieutenant Sixteenth Infantry	6,329 83	
Neall, J. M., lieutenant Fourth Cavalry	85,342 42	434 31
Noble, R. H., lieutenant First Infantry	2,915 04	
Nordstrom, C. E., lieutenant Tenth Cavalry	6,829 89	445 78
Noyes, C. R., lieutenant Ninth Infantry	252 25	48 30
O'Connell, J. J., lieutenant First Infantry	1,029 20	
O'Connor, C. M., lieutenant Eighth Cavalry		7 30
Perry, A. J., colonel and assistant quartermaster-general	58,743 37	
Patten, W. S., captain and assistant quartermaster	71,336 04	28,748 59
Pond, G. E., captain and assistant quartermaster	54,219 94	98 79
Pullman, J. W., captain and assistant quartermaster	81,279 02	10,318 47
Pope, J. W., captain and assistant quartermaster	223,618 53	3,925 11
Pitman, J., captain Ordnance Department	2,564 36	
Phipps, F. H., major Ordnance Department	731 72	
Pope, J., lieutenant First Artillery	3,345 20	
Parkhurst, C. D., lieutenant Fourth Artillery	4,949 89	121 54
Pratt, S., lieutenant Third Artillery	14,725 79	207 05
Pratt, E. B., lieutenant Twenty-third Infantry	2,143 60	
Patten, F. J., lieutenant Twenty-first Infantry	689 90	
Pearson, D. C., lieutenant Second Cavalry	20,510 59	700 00
Patterson, G. T. T., lieutenant Fourteenth Infantry	22,931 38	145 10
Parker, J., lieutenant Fourth Cavalry	23,285 01	
Porch, J. W., United States consul-general, City of Mexico	687 40	140 66
Patten, G. H., lieutenant Twenty-second Infantry	2,754 20	
Perry, J. A., lieutenant Tenth Infantry	329 85	280 73
Plummer, E. H., lieutenant Eighth Infantry	345 65	
Paddock, G. H., lieutenant Fifth Cavalry	118 87	
Patch, A. M., lieutenant Fourth Cavalry	8,696 11	8,841 24
Reynolds, C. A., lieutenant-colonel and deputy quartermaster-general	2,875 40	
Robinson, A. G., major and quartermaster	56,164 49	4,722 50
Robinson, A. G., major and quartermaster, Signal Service account	524 83	25 17
Rockwell, A. F., major and quartermaster	547,161 77	7,003 27
Rockwell, C. H., lieutenant Fifth Cavalry	41,523 88	1,371 35
Rexford, W. H., captain Ordnance Department	888 08	
Ray, P. H., lieutenant Eighth Infantry	5,135 84	40 86
Rice, F. S., lieutenant First Artillery	3,224 37	
Roe, C. F., lieutenant Eleventh Infantry	3,031 42	
Rockwell, J., jr., captain Ordnance Department	430 00	
Rublen, G., lieutenant Seventeenth Infantry	5,951 72	15 86
Ritzius, H. P., lieutenant Twenty-fifth Infantry	794 47	
Robinson, W. W., jr., lieutenant Seventh Cavalry	15,144 07	115 56
Root, E. A., lieutenant Twenty-second Infantry	50 45	
Rowan, H., lieutenant Second Artillery	215 63	
Betty, H. J., lieutenant Fifth Artillery	30,491 42	3,280 22
Robinson, H. E., lieutenant Fourth Infantry	11,709 68	
Regan, J., lieutenant Ninth Infantry	8,221 28	74 94
Roach, H. M., lieutenant First Infantry	8,474 13	
Reed, H. D., lieutenant Twenty-fifth Infantry	1,352 08	
Rondiez, L. S., lieutenant Fifteenth Infantry	4,080 72	15 71
Richards, W. V., captain Sixteenth Infantry	90 00	
Randolph, B. H., lieutenant Third Artillery		300 00
Sexton, R., colonel and assistant quartermaster-general	89,577 28	9,048 00
Scally, J. W., major and quartermaster	51,563 36	2,215 08
Smith, G. C., major and quartermaster	24,121 97	25

Amounts expended by officers of the Quartermaster's Department, &c.—Continued.

Names of officers.	Expenditures.	Balances.
Simpson, J., captain and assistant quartermaster	\$194,855 43	\$22,952 37
Stiles, D. F., lieutenant Tenth Infantry	4,726 54	
Scott, G. L., lieutenant Sixth Cavalry	2,019 83	
Sage, W. N., captain Eleventh Infantry	384 20	
Scantling, J. C., lieutenant Second Artillery	5,030 41	
Smith, S., lieutenant Second Artillery	4,200 43	35 39
Sage, G. E., lieutenant Fifth Artillery	433 70	
Sladen, J. A., lieutenant Fourteenth Infantry	24,953 33	
Sargent, H. H., lieutenant Second Cavalry	3,952 39	138 48
Steever, E. Z., captain Third Cavalry	178 95	
Smith, W. H., lieutenant Tenth Cavalry	381 45	69 45
Stotsenberg, J. M., lieutenant Sixth Cavalry	9,681 38	126 76
Seyburn, S. T., lieutenant Tenth Infantry		239 35
Tompkins, C. H., colonel and assistant quartermaster-general	64,091 48	73,069 89
Terrett, C. P., lieutenant Eighth Infantry	379 76	
Thies, F., lieutenant Third Infantry	12,000 17	16 35
Turner, G. L., lieutenant Eighteenth Infantry	709 75	
Thorp, F., lieutenant Fifth Artillery	11,333 50	16 55
Taylor, C. W., lieutenant Ninth Cavalry	16,538 39	1,395 86
Truitt, C. M., lieutenant Twenty-first Infantry	4,109 48	
Taylor, A. C., lieutenant Second Artillery	464 00	
Tyson, L. D., lieutenant Ninth Infantry	250 81	
Thompson, C. B., lieutenant Fifth Infantry	9,567 71	48 95
Tutherly, H. E., lieutenant First Cavalry	624 64	
Vedder, S. C., lieutenant Nineteenth Infantry	16,901 62	
Van Orsdale, J. T., lieutenant Seventh Infantry	12,208 20	172 75
Varney, A. L., captain Ordnance Department	94 29	121 00
Weeks, George H., major and quartermaster	494,735 49	98,560 42
Williams, C. W., captain and assistant quartermaster	48,182 61	
Wheeler, D. D., captain and assistant quartermaster	175,419 73	9,870 72
Wilson, R. H., lieutenant Eighth Infantry	697 00	7 50
Wainwright, R. P. P., lieutenant First Cavalry	17,297 76	17 47
Wheeler, H. W., lieutenant Fifth Cavalry	2,908 51	
Webster, J. McA., lieutenant Twenty-second Infantry	16,230 49	9,947 86
Wood, P. G., lieutenant Twelfth Infantry	3,005 81	1,164 55
Whistler, G. N., lieutenant Fifth Artillery	4,676 85	87 61
Wotherspoon, W. W., lieutenant Twelfth Infantry	8,641 25	575 00
Walke, W., lieutenant Second Artillery	4,964 08	2 80
Williams, C. A., lieutenant Twenty-first Infantry	4,321 80	
Wright, H. H., lieutenant Ninth Cavalry	5,010 82	34 39
Wilson, T. H., lieutenant Second Infantry	969 71	
Waltz, M. F., lieutenant Twelfth Infantry	1,665 32	
Wever, B. S., lieutenant First Infantry	1,259 90	
Ward, F. K., lieutenant First Cavalry	1,162 65	
Wolf, S. A., lieutenant Fourth Infantry	85 00	
Wygant, H., lieutenant Twenty-fourth Infantry	19,022 06	
Whitney, F. A., lieutenant Eighth Infantry	390 75	
Young, A. H., captain and assistant quartermaster	35,174 79	1,362 06
Total	8,539,421 28	789,582 50

From returns made to this date there has been received from such sales \$153,537.46. This amount has been credited to appropriations, as follows:

Statement showing the amount received from sales of quartermaster's property to officers and soldiers of the Army during the fiscal year ended June 30, 1886.

Regular supplies	\$114,405 94
Incidental expenses	8 69
Cavalry and artillery horses	4,629 14
Barracks and quarters	2 64
Army transportation	41 73
Clothing and equipage	34,449 32
Total	153,537 46

The law requires the rendition of accounts of all moneys expended by officers of the Quartermaster's Department on account of appropriations made for the Quartermaster's Department to the Quartermaster-General, in whose office they pass an administrative examination before

they are transmitted to the Treasury accounting officers. A like requirement applies to returns of quartermaster stores and clothing and equipage.

There are now employed in the accounts branch of this office twenty-seven persons on clerical duty; of whom eleven are directly employed in the examination of money accounts in their various phases; of these six are termed analyzers, two of whom are under instruction.

The remainder of the force is engaged on records, correspondence, files, and the examination of property returns and the correspondence connected therewith.

The work of examination (analysis) is now about eight months in arrears, and has been so, more or less, for some years past. This should not be the case. Justice to the officers demands that the examination of their accounts should be further advanced than it is, so that they may have timely notice of any difference arising in their examination, that they may be able to promptly and easily correct them.

Laws of recent years have imposed some additional restrictions in the procurement and purchase of supplies and expenditure of public money, consequently increasing the work of examination of accounts in this office as well as at the Treasury, particularly the law of July 5, 1884.

Experience has shown that a large proportion of the force should be men of fair education, good business qualifications, and skilled in clerical work, or with sufficient knowledge to easily be able, with short training, to perform clerical duty in any and every branch of this office.

4.—*Statement of returns of clothing and equipage received and examined, and of letters received and written relating to their settlement, during fiscal year ended June 30, 1886.*

Returns on hand June 30, 1885	2,052
Returns received during the fiscal year	3,608
Total.....	5,660
Returns examined during the fiscal year	4,476
Returns on hand for examination June 30, 1886	1,184
Letters received pertaining to settlement of accounts and to inspection reports and boards of survey	2,791
Letters written pertaining to settlement of accounts, and to inspection reports and boards of survey	7,352

Respectfully submitted.

J. G. CHANDLER,
Deputy Quartermaster-General, U. S. Army.

5.—*Report of Lieut. Col. J. G. Chandler, deputy quartermaster-general, U. S. Army, of the operations of the barracks and quarters branch for the fiscal year ended June 30, 1886.*

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE,
Washington, September 10, 1886.

GENERAL: I have the honor to report that Congress, by act approved March 3, 1885, granted in Army bill, under the head of "Barracks and quarters," \$675,000.

Barracks and quarters	\$675,000 00
Amounts credited to the appropriation during fiscal year	59 12
Total to be accounted for	675,059 12
Remitted to officers for rents	154,013 31
Remitted to officers for repairs, constructions, and hired labor	520,633 73
Requested on Treasury settlements	412 08
Total accounted for	675,059 12

The principal operations of the barracks and quarters branch of this office for the year may be noted as follows:

NEW CONSTRUCTIONS.

During the year the construction was duly authorized of one hundred and ten new buildings, consisting of barracks, officers' quarters, stables, store-houses, guard-houses, shops, &c., at an estimated cost of \$211,120. These buildings were erected at the military posts in the States of Nebraska, Texas, California, Louisiana, Michigan, New York, Maine, Maryland, Virginia, Arkansas, Alabama, and in the Territories of Wyoming, Idaho, Utah, Dakota, Indian, Colorado, Washington, and Arizona.

REPAIRS.

Based upon special estimates, authority was given to make repairs, alterations, &c., to public buildings, for the purchase of building material and tools for use at the various military posts, to the amount of \$199,096.

Recapitulation of the expenditures authorized for new buildings, repairs, &c., and how distributed.

Designation.	Construction.	Repairs.	Total.
Department of the Platte	\$30,203	\$20,876	\$51,079
Department of Dakota	18,941	30,294	49,235
Department of Missouri	8,347	41,187	49,534
Department of Texas	18,594	12,573	31,167
Total Division of Missouri	76,085	104,930	181,015
Department of California	14,685	17,284	31,969
Department of Columbia	25,559	6,456	32,015
Department of Arizona	37,384	27,642	65,026
Total Division of Pacific	77,628	51,382	129,010
Division of Atlantic	57,407	42,784	100,191
Total	211,120	199,096	410,216

In addition to the above, the following expenditures were authorized for barracks and quarters, repairs and improvements, at the following independent posts, recruiting stations, and depots:

Designation.	Cost.	Designation.	Cost.
Jefferson Barracks	\$13,603	Philadelphia depot	\$1,913
Saint Louis clothing depot	3,129	Jeffersonville depot	4,141
Columbus Barracks	1,931		
Wilets Point	22,817	Total	85,934
Davids Island	38,400		

SPECIAL PROJECTS.

Congress, in sundry civil bill of July 7, 1884, granted, for the construction of buildings at, and the enlargement of, such military posts as in the judgment of the Secretary of War may be necessary, \$200,000. Out of this fund the Secretary of War, on August 7, 1884, granted for the rebuilding of Fort D. A. Russell, Wyoming, \$100,000.

Congress further, in sundry civil bill of March 3, 1885, granted, for the construction of buildings at, and the enlargement of, such military posts as in the judgment of the Secretary of War may be necessary, \$165,000; \$15,000 of which sum may be used for the purchase of a site near Atlanta, Ga., for the erection thereon of a 10-company post. This made available \$265,000, which the Secretary of War distributed as follows:

For San Antonio Barracks.....	\$75,000
For Fort Riley.....	30,000
For Fort Niobrara.....	30,000
For Fort Niagara.....	20,000
For Presidio Barracks.....	20,000
For Atlanta Barracks.....	75,000
For Atlanta land.....	15,000

Total..... 265,000

The following statement shows the character of the work done, cost, &c.:

Designation.	Cost.	Designation.	Cost.
With the \$100,000 granted to Fort D. A. Russell:		With the \$75,000 granted for enlargement of post at San Antonio, Tex.:	
Moving post trader's building.....	\$385 00	Four barracks.....	\$39,273 00
Building work shops and ice-house..	3,065 00	Five officers' quarters.....	24,250 00
Extra-duty service.....	61 60	Administration building.....	5,548 00
Building commissary and quartermaster's storehouse.....	7,500 00	Nine outhouses.....	3,350 00
Material for repairs.....	191 89	Extra pointing, door-bells and lights.....	1,017 22
Building outhouses, &c.....	521 00	Advertising.....	176 56
Building six sets non-commissioned officers' quarters.....	7,200 00	Hire of superintendent and draftsman.....	825 00
Building engine-house.....	1,390 00	Fences.....	560 22
Extra-duty service.....	70 40		75,000 00
Repairing chaplain's quarters.....	1,197 00		
Repairing surgeon's quarters.....	2,040 00	With the \$30,000 granted for enlargement of Fort Niobrara, Nebraska:	
Repairing commanding officer's quarters.....	1,169 00	Three cavalry stables.....	3,000 00
Material for repairs.....	602 10	Three cavalry barracks.....	10,240 00
Extra-duty service.....	4 50	Six sets officers' quarters.....	13,650 00
Do.....	17 60	Outbuildings, walks, &c.....	3,110 00
Building four sets captains' quarters.....	15,920 00		30,000 00
Repairing officers' quarters.....	2,505 00		
Building two company barracks.....	13,900 00	With the \$30,000 granted for enlargement of Fort Riley, Kans.:	
Repairing officers' quarters.....	2,505 00	For barracks.....	22,750 00
Building one company barracks.....	6,950 00	For officers' quarters.....	6,774 00
Building magazine.....	950 00	Bath-room fixtures.....	213 70
Building oil-house.....	890 00	Plans and specifications.....	225 00
Building one set captains' quarters.....	3,980 00	Advertising.....	37 30
Do.....	3,980 00		30,000 00
Building one set barracks.....	6,950 00		
Repairing officers' quarters.....	2,505 00	With the \$20,000 granted for enlargement of Fort Niagara, N. Y.:	
Do.....	2,505 00	One barracks, two double sets of officer's quarters.....	20,000 00
Building fences, &c.....	350 00		
Building barracks.....	6,950 00	With the \$20,000 granted for enlargement of Presidio, San Francisco, Cal.:	
Do.....	6,950 00	Two barracks.....	7,000 00
Building field officers' quarters.....	7,900 00	Four officers' quarters.....	13,000 00
Building bake-house.....	1,476 00		20,000 00
Repairing gymnasium.....	844 31		
Advertising.....	399 60		
	113,825 00		
Deductions made by alterations named in contract with Capt. J. H. Lord, assistant quartermaster, of December 13, 1885, and memorandum agreement dated August 26, 1885.....	13,825 00		
	100,000 00		

NEW POST NEAR ATLANTA.

The Department of Justice having rendered favorable opinion regarding title to site selected by Major-General Hancock, the full amount of purchase-money, \$15,000, appropriated by act already referred to, was paid therefor.

The Secretary of War, on June 23, 1886, decided that the buildings should be constructed of brick, and at that time approved plans for the erection of one double barracks, \$22,740; one triple barracks, offices, and band, \$29,420; one commissary store-house, \$4,730; one bake-house, \$4,230; total, \$61,120. The work thereon is now in progress under contract.

GENERAL ORDERS, }
No. 9. }

HEADQUARTERS OF THE ARMY,
ADJUTANT-GENERAL'S OFFICE,
Washington, February 11, 1886.

The following act of Congress is published for the information and government of all concerned:

AN ACT making an appropriation for the purchase of the old Produce Exchange building and the site bounded by Whitehall, Pearl, Moore, and Water streets, New York City, for Army purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of two hundred and fifty thousand dollars, or so much thereof as may be necessary, be, and hereby is, appropriated for the purchase of the old Produce Exchange building and site, bounded by Whitehall, Pearl, Moore, and Water streets, New York City, for Army purposes, and two hundred thousand dollars, or so much thereof as may be necessary, for the alteration and remodeling of the building, so as to make it suitable in all respects for Government use, said appropriation to be expended under the direction of the Secretary of War: *Provided,* That before the expenditure of any of the appropriation hereby made, good and valid title shall be secured to the United States for the land and the improvements thereon contemplated by this act, and the consent of the legislature of the State of New York obtained to the purchase thereof.

Approved, February 2, 1886.

By command of Lieutenant-General Sheridan:

R. C. DRUM,
Adjutant-General.

Favorable opinion having been given by the Department of Justice as to title, the full amount of the purchase-money was paid, and the work on the new building duly contracted for is now being pushed forward with vigor, under the direction of the depot quartermaster on duty at that city.

Expenditures authorized for water drainage, sewer, wharf, road, and various other improvements chargeable to the appropriation for Army transportation.

Station.	Water drainage, sewerage.	Roads, bridges, pavements.	Wharves.	Miscellaneous.	Station.	Water drainage, sewerage.	Roads, bridges, pavements.	Wharves.	Miscellaneous.
Fort Bridger	\$3,422	.....	.....	.....	Fort Canby	\$450	.....	\$3,547	.....
Cheyenne depot .....	.....	.....	.....	\$187	Fort Walla Walla ..	1,110	.....	.....	.....
Fort Douglas	4,819	.....	.....	12	Fort Huachuca .....	.....	.....	.....	\$48
Fort Laramie .....	.....	.....	.....	9	Fort Grant	888	.....	.....	.....
Fort Niobrara	680	.....	.....	.....	Fort Lowell .....	.....	.....	.....	344
Fort Omaha .....	.....	.....	.....	48	Fort Verde	1,283	.....	.....	.....
Fort Russell	1,872	.....	.....	.....	Fort Ontario	517	.....	.....	20
Fort Steele .....	.....	.....	.....	80	Fort Wayne	238	\$625	.....	3
Fort Washakie .....	.....	.....	.....	108	Fort Brady	932	.....	.....	.....
Fort Snelling .....	.....	.....	.....	16	Fort Mackinac .....	.....	.....	.....	12
Fort Sisseton	358	.....	.....	.....	Fort Porter .....	.....	.....	.....	170
Fort Randall	4,000	.....	.....	.....	Fort Niagara	10,367	.....	.....	173
Fort Bayard	2,500	.....	.....	243	Fort Preble .....	.....	.....	.....	91
Fort Leavenworth .....	.....	\$225	.....	.....	Fort Adams	4,460	.....	.....	.....
Fort Stanton .....	.....	.....	.....	175	Fort Trumbull .....	.....	.....	.....	634
Fort Lyon	450	.....	.....	106	Fort Schuyler .....	.....	.....	.....	30
Fort Riley	1,835	.....	.....	.....	Fort McHenry .....	.....	.....	.....	735
Fort Reno	635	.....	.....	.....	Washington Bar- racks .....	.....	1,000	.....	968
Fort Sill	3,156	.....	.....	.....	Columbus Barracks ..	1,098	.....	.....	115
Canadian River .....	.....	1,000	.....	.....	Fort Wadsworth .....	.....	.....	.....	1,079
Fort Supply .....	.....	.....	.....	465	Willetts Point	3,750	.....	450	341
Jefferson Barracks	1,600	.....	.....	5,337	David's Island	5,532	.....	597	10
Fort Brown .....	.....	.....	.....	22	Fort Monroe	563	.....	6,410	541
Fort Clark .....	.....	.....	.....	68	Fort Marion	350	.....	.....	.....
Fort Concho .....	.....	.....	.....	131	Fort Barrancas .....	.....	442	.....	.....
Fort Davis	2,242	.....	.....	.....	Newport Barracks	40	.....	.....	30
Fort Stockton .....	.....	.....	.....	48	Little Rock Bar- racks	506	.....	.....	6
Fort San Antonio	1,195	.....	.....	.....	Philadelphia depot ..	.....	5,260	.....	.....
Fort Hancock	470	.....	.....	.....	Jeffersonville depot ..	1,800	.....	.....	1,000
Alcatraz Island	144	.....	.....	.....	Total	69,816	\$8,552	12,787	13,405
Angel Island	4,016	.....	\$680	.....				
Presidio	1,167	.....	1,108	.....				
Fort Spokane	1,871	.....	.....	.....		

Aggregate, \$104,560.

* Congress, in sundry civil bill of March 3, 1885, granted \$10,000 for improving the roads on the Fort Leavenworth reservation.

HOSPITALS.

By act of March 3, 1885, Congress granted \$100,000 for construction and repair of hospitals.

The following table gives the locality of the hospitals and the amount authorized at each:

Department and post.	Amount.	Department and post.	Amount.
<i>Division of the Missouri.</i>		<i>Division of the Missouri—Continued.</i>	
Platte:		Dakota—Continued.	
Fort Bridger, Wyo.	\$250	Fort Yates, Dak.	\$106
Fort Douglas, Utah.	66	Fort Meade, Dak.	615
Fort Laramie, Wyo.	86	Fort Lincoln, Dak.	341
Fort McKinney, Wyo.	194	Fort Buford, Dak.	178
Fort Niobrara, Nebr.	42	Fort Keogh, Mont.	164
Fort Omaha, Nebr.	32	Fort Custer, Mont.	135
Fort Russell, Wyo.	912	Fort Assiniboine, Mont.	137
Fort Sidney, Nebr.	204	Fort Shaw, Mont.	207
Fort Steele, Wyo.	406	Fort Maginnis, Mont.	529
Fort Washakie, Wyo.	1,845	Fort Missoula, Mont.	30
Total	8,537	Total	8,590
Dakota:		Missouri:	
Fort Snelling, Minn.	675	Fort Bliss, Tex.	229
Fort Sisseton, Dak.	3,177	Fort Lewis, Colo.	11,400
Fort Pembina, Dak.	577	Fort Elliott, Tex.	970
Fort Totten, Dak.	1,233	Fort Gibson, Ind. T.	268
Fort Randall, Dak.	268	Fort Hays, Kans.	461
Fort Sully, Dak.	116	Fort Leavenworth, Kans.	417
Fort Bennett, Dak.	89		

Department and post.	Amount.	Department and post.	Amount.
<i>Division of the Missouri—Continued.</i>		<i>Division of the Pacific—Continued.</i>	
Missouri—Continued.		Arizona—Continued.	
Fort Lyon, Colo.	\$36	Fort Selden, N. Mex.	\$545
Fort Riley, Kans.	89	Fort Union, N. Mex.	166
Fort Reno, Ind. T.	665	Fort Stanton, N. Mex.	1,322
Fort Sill, Ind. T.	134	Fort Wingate, N. Mex.	696
Fort Supply, Ind. T.	346	Fort Huachuca, Ariz.	180
Jefferson Barracks, Mo.	4,412	Fort Thomas, Ariz.	348
Chilocco Creek, Ind. T.	44	Fort Grant, Ariz.	106
Total.	19,471	Fort McDowell, Ariz.	380
Texas:		Fort Mohave, Ariz.	278
Fort Clark, Tex.	645	Whipple Barracks, Ariz.	6,731
Fort Concho, Tex.	359	Total.	20,688
Fort McIntosh, Tex.	550	<i>Division of the Atlantic.</i>	
Fort Ringgold, Tex.	51	Atlantic:	
Fort Sackett, Tex.	513	Fort Ontario, N. Y.	1,820
Fort San Antonio, Tex.	15,362	Fort Wayne, Mich.	177
Fort Hancock, Tex.	5,185	Fort Brady, Mich.	720
Fort Pena Colorado, Tex.	116	Fort Mackinac, Mich.	20
Fort Davis, Tex.	687	Fort Porter, N. Y.	186
Total.	23,468	Fort Niagara, N. Y.	58
Total Division of the Missouri.	55,066	Madison Barracks, N. Y.	126
<i>Division of the Pacific.</i>		Plattsburg Barracks.	61
California:		Fort Preble, Me.	117
Alcatraz Island, Cal.	46	Fort Warren, Mass.	175
Benicia Barracks, Cal.	319	Fort Adams, R. I.	458
Fort Bidwell, Cal.	907	Fort Trumbull, Conn.	235
Fort Gaston, Cal.	162	Fort Hamilton, N. Y. Harbor.	435
Fort McDermitt, Nev.	73	Fort Columbus, N. Y. Harbor.	95
Fort Mason, Cal.	131	Fort Schuyler, N. Y.	647
Fort Halleck, Nev.	258	Fort McHenry, Md.	1,004
Presidio.	431	Washington Barracks, D. C.	707
Total.	2,327	Columbus Barracks, Ohio.	1,750
Columbia:		Fort Wadsworth, N. Y. Harbor.	830
Boise Barracks, Idaho.	88	Willetts Point, N. Y. Harbor.	286
Fort Canby, Wash.	7,000	David's Island, N. Y. Harbor.	18
Fort Cœur d'Alene, Idaho.	3,732	Fort Monroe, Va.	284
Fort Klamath, Oreg.	63	St. Francis Barracks, Fla.	186
Fort Townsend Wash.	136	Jackson Barracks, La.	291
Vancouver Barracks, Wash.	611	Fort Barrancas, Fla.	169
Total.	11,630	Newport Barracks, Ky.	5,951
Arizona:		Little Rock Barracks, Ark.	6,470
Fort Bayard, N. Mex.	1,468	Mt. Vernon Barracks, Ala.	220
Fort Marcy, N. Mex.	813	West Point, N. Y.	204
		Total Division of the Atlantic.	23,700
		Total authorized.	99,454

FORT BROWN, TEX.

Congress, in sundry civil bill of March 3, 1875, granted for purchase of site of Fort Brown, \$25,000, and further, by act of March 3, 1885, in sundry civil bill, granted \$160,000 to enable the Secretary of War to acquire good and valid title to the reservation, and to pay and to extinguish all claims for the use and occupation of the land; provided that no part of said \$160,000 shall be paid until a complete title is vested in the United States, and that the full amount of the price, including rent, shall be paid directly to the owner of the property.

No portion of this money has been expended; it is still in the Treasury, the Department having thus far failed to obtain a good and sufficient title.

PROPERTY TRANSFERRED.

Under the act approved July 31, 1882, entitled "An act to provide additional industrial training schools for Indian youths, and authorize H. Ex. 1, pt. 2—27

ing the use of unoccupied military barracks for such purpose," twenty-three buildings at Fort Lapwai, Ind. T., were so transferred to the Interior Department November 17, 1885.

POST CEMETERIES.

Under this head remains of soldiers have been transferred as follows:

From Forts Craig, Butler, Bascom, and McRae, N. Mex.; old Fort Lewis, Colo.; Fort Larned, Kans.; Pagosa Springs, Colo.; Fort Dodge, Kans., and Fort Wallace, Kans., to the Fort Leavenworth Cemetery.

From old Fort Sully, Dak., to present fort.

From old Fort Abercrombie, Dak., to Fort Lincoln, Dak.

From old camp on White River, Colo., to Fort McPherson, Nebr.

From Governor's Island to Cypress Hills Cemetery.

From Mount Vernon Barracks, Ala., to Mobile, Ala.

Fence and head board improvements have been made at Forts Reno, Sill, Boisé, and McHenry, and a vault provided at Davids' Island, New York Harbor, for use of bodies awaiting transit to Cypress Hill Cemetery.

RESERVATIONS.

Fort Lowell, Ariz., boundaries enlarged by the President, May 15, 1886, in order to secure a good water supply.

Fort Reno, Ind. T., timber reservation, declared by President December 30, 1885.

Fort Sully, limits modified by President July 30, 1885.

TRANSFERRED TO INTERIOR DEPARTMENT.

Fort Cameron, July 2, 1885.

Winter pasturage reservation at Fort Cœur d'Alene, April 27, 1886

Fort Klamath, Oreg., May 4, 1886.

Old powder-house lot at Saint Augustine, Fla., March 18, 1886.

Certain parts of Fort Hays reservation May 13, 1886.

Losses by fire.

Date.	Post.	Property destroyed or injured.
1885.		
Aug. 21	Plattsburg Barracks, N. Y	Laundresses' quarters.
Oct. 11	Fort Lewis, Colo.....	Shops.
Oct. 8	West Point, N. Y.....	Tools.
Dec. 17	Fort Elliott, Tex.....	Shops.
Dec. 20	Fort Ellis, Mont.....	Officers' quarters.
1886.		
Jan. 3	Fort Custer, Mont.....	Barracks.
Jan. 20	do.....	Stable.
Jan. 5	Uncompahgre, Colo.....	Barracks.
Feb. 22	Fort Leavenworth, Kans.....	Stable.
May 13	Columbus Barracks.....	Barracks and hospitals.
June 12	Fort Wingate.....	Saw-mill, &c.
June 20	Fort Apache.....	Machinery.

In connection with this report a statement is submitted compiled from latest data on file showing actual expenditures made during the past fiscal year on account of barracks and quarters at the various posts and stations, the particular buildings repaired and erected; also statements showing property rented by the quartermaster's Department and in service June 30, 1886.

J. G. CHANDLER,

Deputy Quartermaster-General, U. S. Army

The QUARTERMASTER-GENERAL U. S. ARMY.

A.—Statement compiled from reports thus far received showing expenditures actually made on account of repairs and construction of public buildings at various posts, during fiscal year ending June 30, 1886.

DIVISION OF THE MISSOURI

DEPARTMENT OF TEXAS.

Post.	Buildings.	Cost.	Total.
McIntosh.....	Officers' quarters No. 2.....	\$32	
	Officers' quarters No. 3.....	50	
	Officers' quarters No. 4.....	37	
	Officers' quarters No. 5.....	2	
	Officers' quarters No. 8.....	30	
	Officers' quarters No. 9.....	67	
	Converting old hospital into officers' quarters.....	2,490	
	Company quarters No. 14.....	52	
	Company quarters No. 15.....	5	
	Company quarters No. 16.....	11	
	Administration building.....	87	
	Bakery.....	62	
	Chapel and school-house.....	453	
	Officers' quarters No. 27.....	3	
	Guard-house (built).....	2,000	
			\$5,381
Concho.....	Commanding officers' quarters.....	6	
	Officers' quarters No. 2.....	15	
	Officers' quarters No. 3.....	80	
	Officers' quarters No. 4.....	29	
	Officers' quarters No. 5.....	6	
	Officers' quarters No. 6.....	9	
	Officers' quarters No. 7.....	15	
	Officers' quarters No. 8.....	7	
	Officers' quarters No. 9.....	19	
	Officers' quarters No. 10.....	8	
	Administration building.....	11	
	Barracks No. 14.....	19	
	Barracks No. 15.....	9	
	Barracks No. 16.....	19	
	Barracks No. 17.....	9	
	Barracks No. 18.....	6	
	Barracks No. 19.....	13	
	Barracks No. 20.....	37	
	Barracks No. 21.....	69	
	Guard-house.....	9	
	Work-shops.....	2	
	Forage-house.....	1	
	Quartermaster's corral.....	10	
	Quartermaster's corral No. 2.....	12	
	Officers' quarters No. 11.....	4	
	Bakery.....	36	
	Engine-house.....	4	
	Married soldiers' quarters.....	1	
			465
San Antonio, headquarters and depot.	Officers' quarters No. 1.....	105	
	Officers' quarters No. 2.....	15	
	Officers' quarters No. 3.....	4	
	Officers' quarters No. 4.....	193	
	Officers' quarters No. 5.....	3	
	Officers' quarters No. 6.....	106	
	Officers' quarters No. 7.....	142	
	Officers' quarters No. 8.....	22	
	Officers' quarters No. 9.....	17	
	Officers' quarters No. 10.....	3	
	Officers' quarters No. 11.....	4	
	Officers' quarters No. 12.....	3	
	Officers' quarters No. 13.....	105	
	Officers' quarters No. 14.....	15	
	Officers' quarters No. 15.....	16	
	Engine-house.....	3	
	Quartermaster's stables and corral.....	730	
	Quartermaster's depot.....	973	
			2,459
San Antonio.....	Minor repairs to various buildings.....		580
Rice.....	Minor repairs to various buildings.....	Not given.	
Davis.....	Officers' quarters No. 10.....	363	
	Officers' quarters No. 12.....	893	
	Officers' quarters No. 13.....	11	
	Quartermasters' store-house.....	725	
	Officers' quarters No. 7.....	1,463	
	Forage-house (built).....	2,000	
	Cavalry corral (built).....	500	
	Engine-house (built).....	103	
	Fences.....	882	
			6,885

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

DIVISION OF THE MISSOURI—Continued.

DEPARTMENT OF TEXAS—Continued.

Post.	Buildings.	Cost.	Total.
Clark	Officers' quarters (built)	\$6,066	
	Officers' quarters Nos. 2 and 3	197	
	Officers' quarters No. 4	154	
	Officers' quarters No. 9	14	
	Officers' quarters Nos. 10 and 11	636	
	Officers' quarters Nos. 12 and 13	784	
	Officers' quarters Nos. 14 and 15	719	
	Officers' quarters Nos. 16 and 17	634	
	Officers' quarters Nos. 18 and 19	824	
	Officers' quarters No. 20	99	
	Officers' quarters Nos. 21 and 22	526	
	Officers' quarters Nos. 23 and 24	600	
	Officers' quarters Nos. 25 and 26	294	
	Officers' quarters No. 27	116	
	Barracks No. 1	243	
	Barracks No. 2	2,119	
	Barracks No. 3	267	
	Barracks No. 4	1,025	
	Barracks No. 5	9	
	Barracks No. 6	76	
	Barracks No. 7	261	
	Barracks No. 8	2	
	Barracks No. 9	284	
	Barracks No. 10	379	
	Band quarters	41	
	Forage-house	112	
	Guard-house	639	
	Commissary store-house	229	
	Laundress's quarters	300	
	Quartermaster's corral	8	
Del Rio	Commanding officer's quarters	1	\$17,657
	Officers' quarters	2	
	Barracks	25	
	Store-house	6	
	Officers' quarters No. 5	16	
	Bakery	5	
	Guard-house	6	
	Stables	18	
Ringgold	Officers' quarters Nos. 1 and 2	917	
	Officers' quarters Nos. 3 and 4	828	
	Officers' quarters No. 5	791	
	Officers' quarters Nos. 6 and 7	6	
	Officers' quarters Nos. 8 and 9	792	
	Barracks No. 14	5	
	Barracks No. 15	5	
	Barracks No. 17	5	
	Store-room	5	
	Barracks No. 18	2	
	Quartermaster's store-house	4	
	Officers' quarters Nos. 41 and 42	5	
Pena Colorado	Commanding officer's quarters	125	
	Store-house	14	
	Post quartermaster-sergeant's quarters	8	
			3,365
Brown	Commanding officer's quarters	27	
	Officers' quarters Nos. 1 and 2	18	
	Officers' quarters Nos. 3 and 4	18	
	Officers' quarters Nos. 5 and 6	27	
	Officers' quarters Nos. 7 and 8	18	
	Officers' quarters Nos. 9 and 10	27	
	Officers' quarters Nos. 11 and 12	18	
	Officers' quarters Nos. 13 and 14	16	
	Officers' quarters No. 15	13	
	Officers' quarters No. 18	84	
	Officers' quarters B	3	
	Administration building	39	
	Barracks No. 34	16	
	Barracks No. 35	16	
	Store-house No. 36	75	
	Cavalry stable (built)	780	
	Smiths' shop (built)	14	
	Artillery barracks	12	
	Ordnance-sergeant's quarters	2	
	Cavalry barracks No. 53	239	
			147

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

DIVISION OF THE MISSOURI—Continued.

DEPARTMENT OF TEXAS—Continued.

Post.	Buildings.	Cost.	Total.
Brown—Continued	Cavalry stables	\$42	
	Headquarters' stables	1	
	Quartermasters' corral	2	
	Reservation wall	34	
			\$1,491
	Total Department of Texas		88,504

DEPARTMENT OF THE MISSOURI.

Leavenworth, depot and headquarters.	Commanding general's quarters	\$1,327	
	Medical director's quarters	171	
	Paymaster's quarters	200	
	Chief quartermaster's quarters	24	
	Chief commissary subsistence quarters	18	
	Surgeon's quarters	5	
	Inspector's quarters	451	
	Aid-de-camps' quarters	85	
	Officers' quarters No. 9	21	
	Engineer's quarters	182	
	Ordnance officer's quarters	21	
	Depot quartermaster's quarters	8	
	Assistant adjutant-general's quarters	172	
	Office commissary subsistence and store-house	21	
	Store-house No. 15	4	
	Levee-house No. 16	50	
	Commissary store-house No. 17	5	
	Headquarters, Department of Missouri	46	
	Depot warehouse No. 2	9	
	Depot quartermaster's office	52	
	Shops, &c	31	
	Telegraph office	5	
	Employés' quarters No. 27	9	
	Employés' quarters No. 28	13	
	Depot stables	5	
	Depot grain-house	62	
	School building No. 32	62	
	School building No. 33	17	
	Ordnance detachment quarters	1	
	Depot mess-house	373	
Leavenworth	Officers' quarters No. 1 (frame)	154	
	Officers' quarters No. 2 (frame)	117	
	Officers' quarters No. 3 (frame)	121	
	Officers' quarters No. 4 (frame)	22	
	Officers' quarters No. 5 (frame)	26	
	Officers' quarters No. 6 (brick)	2	
	Officers' quarters No. 7 (brick)	15	
	Officers' quarters No. 8 (stone)	32	
	Officers' quarters No. 9 (frame)	32	
	Officers' quarters No. 10 (frame)	36	
	Officers' quarters No. 11 (brick)	112	
	Officers' quarters No. 12 (brick)	116	
	Officers' quarters No. 13 (frame)	79	
	Officers' quarters No. 14 (frame)	83	
	Officers' quarters No. 15 (frame)	64	
	Officers' quarters No. 16 (frame)	70	
	Officers' quarters No. 17 (frame)	66	
	Officers' quarters No. 18 (frame)	182	
	Officers' quarters No. 19 (brick)	5	
	Officers' quarters No. 20 (brick)	19	
	Officers' quarters No. 21 (brick)	15	
	Officers' quarters No. 22 (brick)	9	
	Officers' quarters No. 23 (brick)	5	
	Officers' quarters No. 24 (brick)	8	
	Barracks No. 26 (frame)	42	
	Barracks No. 27 (frame)	31	
	Barracks No. 28 (brick)	23	
	Office post commander and infantry barracks	172	
	Infantry and cavalry school	20	
	Guard-house	31	
	Bakery	5	
			\$3,448

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

DIVISION OF THE MISSOURI—Continued.

DEPARTMENT OF THE MISSOURI—Continued.

Post.	Buildings.	Cost.	Total.
Leavenworth—Continued	Administration building	\$417	
	Quartermaster's store-house	3	
	Shops	13	
	Saw-mill	31	
	Quartermaster's stables	25	
	Cavalry stables No. 51	34	
	Cavalry stables No. 52	32	
	Cavalry stables No. 53	81	
	Cavalry stables No. 54	26	
	Battery stables	26	
	Photograph gallery	12	
	General repairs	20	
Reno	Officers' quarters Nos. 1 and 2	50	\$2,334
	Officers' quarters Nos. 3 and 4	50	
	Commanding officer's quarters	50	
	Officers' quarters Nos. 6 and 7	50	
	Officers' quarters Nos. 8 and 9	50	
	Officers' quarters Nos. 10 and 11	20	
	Officers' quarters No. 12	50	
	Barracks No. 14	40	
	Barracks No. 15	40	
	Company kitchen No. 16	20	
	Barracks No. 17	40	
	Company kitchen No. 18	20	
	Company store-house	15	
	Barracks No. 21	1,000	
	Company store-house (built)	1,500	
	Quartermaster store-house (built)	1,800	
	Adjutant's office	185	
	Barracks No. 24	40	
	Company kitchen No. 25	20	
	Barracks No. 26	40	
	Company kitchen No. 27	20	
Uncompahgre	Office commanding officer	13	5,100
	Officers' quarters No. 3	43	
	Barracks No. 4	7	
	Store-rooms, &c.	30	
	Barracks No. 8	30	
	Officers' quarters No. 9	8	
	Quartermaster's office	20	
	Officers' quarters No. 11	15	
	Store-house No. 12	3	
	Officers' quarters No. 13	8	
	Work-shops	3	
	Officers' quarters No. 17	20	
	Stables and corrals	30	
	Officers' quarters No. 21	50	
	Guard-house	3	
	Ordnance store-house	1	
	Commissary store-room	1	
	Officers' quarters No. 29	11	
	Saw-mill	3	
Elliott	Officers' quarters No. 1	55	299
	Officers' quarters No. 2	60	
	Officers' quarters No. 3	35	
	Officers' quarters No. 4	35	
	Officers' quarters No. 5	35	
	Officers' quarters No. 6	35	
	Barracks No. 12	75	
	Barracks No. 13	75	
	Barracks No. 14	50	
	Barracks No. 15	101	
	Shops (built)	645	
	Cavalry stables (built)	1,398	
Gibson	Commanding officer's quarters	5	2,576
	Officers' quarters No. 2	9	
	Officers' quarters No. 3	9	
	Barracks	424	
	Guard-house	11	
	Officers' quarters No. 6	5	
Lyon	Officers' quarters No. 1	8	463
	Officers' quarters No. 2	8	

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

DIVISION OF THE MISSOURI—Continued.

DEPARTMENT OF THE MISSOURI—Continued.

Post.	Buildings.	Cost.	Total.
Lyon—Continued	Officers' quarters No. 3	\$8	
	Officers' quarters No. 4	8	
	Officers' quarters No. 5	8	
	Officers' quarters No. 6	30	
	Officers' quarters No. 7	13	
	Officers' quarters No. 8	21	
	Officers' quarters No. 9	64	
	Officers' quarters No. 10	23	
	Officers' quarters No. 11	8	
	Officers' quarters No. 12	8	
	Officers' quarters No. 13	8	
	Barracks No. 1 A	15	
	Barracks No. 2 A	15	
	Kitchen No. 2 B	53	
	Barracks No. 3 A	32	
	Barracks No. 4 A	15	
	Barracks E	66	
	Post quartermaster-sergeant's quarters]	13	
	Headquarters building	245	
			\$669
Sill	Commanding officer's quarters	65	
	Officers' quarters No. 2	60	
	Officers' quarters No. 3	60	
	Officers' quarters No. 4	35	
	Officers' quarters No. 5	75	
	Officers' quarters No. 6	30	
	Officers' quarters No. 7	25	
	Officers' quarters No. 8	25	
	Officers' quarters No. 9	20	
	Officers' quarters No. 10	15	
	Officers' quarters No. 11	15	
	Barracks No. 12	80	
	Barracks No. 13	85	
	Barracks No. 14	80	
	Barracks No. 15	70	
	Headquarters building	5	
	Guard-house	10	
	Bakery	5	
	Commissary store-house	25	
	Ordnance store-house	10	
	Teamsters' mess	5	
			800
Supply	Headquarters building	141	
	Barracks No. 4 A	997	
	Barracks No. 4 B	1,226	
	Barracks No. 4 C	211	
	Barracks No. 4 D	1,459	
	Barracks No. 4 E	259	
	Barracks No. 4 F	259	
	Barracks (built)	2,864	
	Bath-house (built)	378	
	Magazine	600	
	Commissary-sergeant's quarters	104	
	Library	205	
	Quartermaster's office and store-house	214	
	Commissary store-house	95	
	Employes' quarters No. 16	164	
	Shops	24	
	Grain-house	873	
	Store-house	416	
	Cavalry stable (built)	1,146	
	Quartermaster's stable (built)	3,082	
	Engine-house	17	
	Employes' quarters No. 34	435	
	Employes' quarters No. 22	73	
	Cavalry stable (frame, built)	2,449	
	Smiths' shop (built)	690	
			18,381
Hays	Officers' quarters No. 1	8	
	Officers' quarters No. 2	24	
	Officers' quarters No. 3	25	
	Officers' quarters No. 4	57	
	Officers' quarters No. 5	27	
	Officers' quarters No. 6	48	
	Officers' quarters No. 7	7	
	Officers' quarters No. 8	4	
	Officers' quarters No. 9	4	
	Officers' quarters Nos. 10 and 11	35	

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

DIVISION OF THE MISSOURI—Continued.

DEPARTMENT OF THE MISSOURI—Continued.

Post.	Buildings.	Cost.	Total.
Hays—Continued.....	Officers' quarters No. 12.....	\$20	
	Barracks No. 13.....	152	
	Barracks No. 14.....	143	
	Barracks No. 15.....	125	
	Office building.....	2	
	Commissary store-house.....	6	
	Non-commissioned officers' quarters.....	148	
	Chapel, &c.....	3	
	Guard-house.....	5	
	Quartermaster's store-house.....	24	
	General repairs.....	153	
			\$1, 000
Riley.....	Commanding officer's quarters.....	327	
	Officers' quarters No. 2.....	298	
	Officers' quarters No. 3.....	291	
	Officers' quarters No. 4.....	183	
	Officers' quarters No. 5.....	117	
	Officers' quarters No. 6.....	86	
	Officers' quarters No. 7.....	117	
	Officers' quarters No. 8.....	268	
	Officers' quarters No. 9.....	276	
	Officers' quarters No. 10.....	268	
	Officers' quarters No. 11.....	335	
	Chaplain's quarter.....	154	
	Officers' mess.....	1, 993	
	Headquarters building.....	946	
	Barracks No. 3.....	294	
	Barracks No. 4.....	399	
	Barracks No. 5.....	238	
	Barracks No. 6.....	256	
	Guard-house.....	11	
	Quartermaster's store-house.....	294	
	Stables.....	1, 096	
	Coal-shed.....	7	
	Company sinks.....	756	
	Musicians' quarters.....	12	
	Ice-house.....	68	
	Scale-house.....	13	
	Fences.....	284	
			9, 387
	Total Department of the Missouri.....		44, 457

DEPARTMENT OF DAKOTA.

Snelling.....	Commanding officer's quarters.....	\$20	
	Officers' quarters No. 2.....	261	
	Officers' quarters No. 3.....	79	
	Officers' quarters No. 4.....	127	
	Officers' quarters No. 5.....	47	
	Officers' quarters No. 7.....	22	
	Non-commissioned staff quarters.....	116	
	Officers' quarters Nos. 11 and 15.....	930	
	School-house.....	7	
	Barracks.....	181	
	Store-house.....	6	
	Stable and corral.....	74	
	Shops.....	17	
	Oil-house.....	8	
	Battery stables.....	127	
	Coal-shed (built).....	573	
			\$2, 595
Bennett.....	Officers' quarters No. 1.....	42	
	Officers' quarters No. 2.....	40	
	Officers' quarters No. 3.....	47	
	Officers' quarters No. 4.....	44	
	Barracks.....	53	
	Office.....	1	
	Bakery.....	9	
	Store-houses.....	16	
	Guard-house.....	11	
	Stables.....	5	
	Shops.....	1	
	Ice-house (built).....	214	
			483

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued

DIVISION OF THE MISSOURI—Continued.

DEPARTMENT OF DAKOTA—Continued.

Post.	Buildings.	Cost.	Total.
Sully	Officers' quarters No. 1.....	\$268	
	Officers' quarters No. 2.....	34	
	Officers' quarters No. 3.....	38	
	Officers' quarters Nos. 4 and 6.....	45	
	Officers' quarters Nos. 5 and 7.....	36	
	Officers' quarters Nos. 8 and 10.....	69	
	Officers' quarters No. 9.....	30	
	Officers' quarters No. 11.....	25	
	Officers' quarters Nos. 12 and 14.....	116	
	Telegraph office.....	12	
	Barracks No. 15.....	160	
	Barracks No. 17.....	525	
	Guard-house.....	37	
	Library.....	19	
	Offices.....	31	
	Quartermaster's store-houses.....	50	
	Bake-house.....	86	
	Non-commissioned staff quarters.....	81	
	Married men's quarters.....	192	
	Chapel.....	50	
	Ice-house.....	182	
	Shops.....	6	
	Barracks Nos. 42 and 43.....	349	
	Stables (built).....	994	
Lincoln	Minor repairs	Not given.	\$3,485
Lincoln ordnance depot .....	.....do.....	Not given.	
Pembina.....	Commanding officer's quarters.....	81	
	Officers' quarters No. 2.....	84	
	Officers' quarters No. 3.....	84	
	Officers' quarters No. 4.....	84	
	Barracks No. 1.....	11	
	Barracks No. 2.....	13	
	Company kitchen No. 1.....	20	
	Company kitchen No. 2.....	4	
	Store-houses.....	10	
	Bakery.....	7	
	Stable.....	23	
	Coal-shed No. 1.....	35	
	Coal-shed No. 2.....	35	
	Pump-house (built).....	536	
	Tank-trestle (built).....	485	
Ellis	Officers' quarters Nos. 1, 2, 3, 4, and 5.....	Not stated.	1,622
	Commissary store-house.....		
	Barracks No. 12.....		
Maginnis	Barracks No. 14.....	Not stated.	
	Barracks No. 3.....		
	Commanding officer's quarters.....		
	Officers' quarters No. 8.....		
	Headquarters building.....		
	Store-houses.....		
	Oil-house (built).....		
	Guard-house.....		
	Non-commissioned staff quarters (built).....		
	Wagon-shed (built).....		
Buford.....	Ice-house (built).....		
	Officers' quarters No. 1.....	62	
	Officers' quarters No. 2.....	79	
	Officers' quarters No. 3.....	30	
	Officers' quarters No. 4.....	96	
	Officers' quarters No. 5.....	33	
	Officers' quarters No. 6.....	85	
	Officers' quarters No. 7.....	50	
	Officers' quarters No. 8.....	37	
	Officers' quarters No. 9.....	81	
	Officers' quarters No. 10.....	34	
	Officers' quarters No. 11.....	34	
	Officers' quarters No. 12.....	56	
	Officers' quarters No. 13.....	74	
	Officers' quarters No. 14.....	86	
	Officers' quarters No. 15.....	75	
	Officers' quarters No. 16.....	82	
	Officers' quarters No. 17.....	76	
	Officers' quarters No. 18.....	60	

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

DIVISION OF THE MISSOURI—Continued.

DEPARTMENT OF DAKOTA—Continued.

Post.	Buildings.	Cost.	Total.
Buford—Continued	Officers' quarters No. 19	\$42	
	Officers' quarters No. 20	18	
	Barracks No. 21	97	
	Barracks No. 22	39	
	Barracks No. 23	145	
	Barracks No. 24	96	
	Barracks No. 25	90	
	Barracks No. 26	58	
	Band quarters and wash-house (built)	2,555	
	Non-commissioned officers' quarters (built)	1,000	
	Non-commissioned officers' quarters	37	
	Office, commanding officer	14	
	Office, post quartermaster	13	
	Office, telegraph	4	
	Subsistence store-house	36	
	Subsistence store-house (built)	2,500	
	Chapel	21	
	Guard-house	5	
	Tank-house	4	
	Shops	127	
	Cavalry stables	208	
	Quartermaster's stables	120	
	Bake-house	11	
			\$8,320
Sisseton	Commanding officer's quarters		
	Company officers' quarters		
	Guard-house		
	Sheds		
	Library		
	Quartermaster's stables		
Keogh	Fences		
	Post quartermaster sergeant's quarters (built)		360
	Officers' quarters Nos. 1 and 2	63	
	Officers' quarters Nos. 3 and 4	60	
	Officers' quarters Nos. 5 and 6	60	
	Officers' quarters Nos. 7 and 8	60	
	Officers' quarters Nos. 9 and 10	87	
	Officers' quarters Nos. 11 and 12	63	
	Officers' quarters Nos. 13 and 14	60	
	Commanding officer's quarters	60	
	Officers' quarters Nos. 15 and 16	60	
	Officers' quarters Nos. 17 and 18	173	
	Officers' quarters Nos. 19 and 20	60	
	Officers' quarters Nos. 21 and 22	60	
	Officers' quarters Nos. 23 and 24	60	
	Officers' quarters Nos. 25 and 26	60	
	Office building	53	
	Barracks No. 17	135	
	Barracks No. 18	449	
	Barracks No. 19	64	
	Barracks No. 20	931	
	Barracks No. 21	354	
	Non-commissioned staff quarters No. 23	71	
	Non-commissioned staff quarters No. 28	63	
	Non-commissioned staff quarters No. 29	123	
	Pump-house	113	
	Quartermaster's stables	120	
	Employeé's quarters	167	
	Guard-house	383	
			4,002
Meade	Officers' quarters		
	Water-closet	30	
	Band stand	17	
Randall	Commanding officer's quarters		
	Officers' quarters Nos. 2 and 3		
	Officers' quarters Nos. 4 and 5		
	Officers' quarters Nos. 6 and 7		
	Officers' quarters Nos. 8 and 9		
	Officers' quarters Nos. 10, 12, 13, and 14		
	Barracks Nos. 1, 2, 3, 4, and 5		
	Commissary-sergeant's quarters		
	Rifle gallery		
	Stable		
	Shops		
	Office		
	Library		
	Bake and guard house		
			500

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

DIVISION OF THE MISSOURI—Continued.

DEPARTMENT OF DAKOTA—Continued.

Post,	Buildings.	Cost.	Total.
Camp Poplar River.....	Officers' quarters Nos. 1 to 7.....	\$500	\$1,017
	Commissary store-house.....	81	
	Guard-house.....	61	
	Quartermaster's store-house.....	75	
	Barracks.....	300	
Shaw.....	Officers' quarters No. 1.....	32	2,205
	Officers' quarters No. 2.....	39	
	Officers' quarters No. 3.....	35	
	Officers' quarters No. 4.....	42	
	Officers' quarters No. 5.....	38	
	Officers' quarters No. 6.....	46	
	Officers' quarters No. 7.....	49	
	Officers' quarters No. 8.....	42	
	Officers' quarters No. 9.....	35	
	Officers' quarters No. 10.....	32	
	Officers' quarters No. 11.....	85	
	Officers' quarters No. 12.....	46	
	Officers' quarters No. 13.....	30	
	Offices.....	215	
	Barracks No. 15.....	116	
	Barracks No. 16.....	113	
	Barracks No. 18.....	185	
	Barracks No. 19.....	186	
	Store-house.....	225	
	Guard-house.....	100	
	Reading-room.....	54	1,578
	Civilians' quarters.....	96	
	Privies.....	414	
Assinniboine.....	Officers' quarters No. 15.....	350	
	Barracks No. 5.....	738	
	Guard-house.....	15	
	Office building.....	288	
	Library.....	12	
	Office.....	8	
	Store-house.....	42	
	Granary.....	23	
	Stables.....	14	
	Bakery.....	1	Not stated.
	Non-commissioned staff quarters.....	23	
	Bath-house.....	59	1,197
Custer.....	Minor repairs to various buildings.....	Not stated.	
Bismarck.....	No repairs reported.....		1,197
Missoula.....	Officers' quarters No. 1.....	48	
	Officers' quarters No. 2.....	86	
	Officers' quarters No. 3.....	32	
	Officers' quarters No. 4.....	16	
	Officers' quarters No. 5.....	24	
	Officers' quarters No. 6.....	15	
	Officers' quarters No. 7.....	34	
	Squad room.....	13	
	Barracks No. 9.....	3	
	Barracks No. 11.....	1	
	Commissary store-house.....	135	
	Quartermaster's store-house.....	75	
	Post hall (built).....	387	
	Guard-house (built).....	328	
Totten.....	Officers' quarters No. 1.....	32	1,197
	Officers' quarters No. 2.....	77	
	Officers' quarters No. 3.....	47	
	Officers' quarters No. 4.....	160	
	Officers' quarters No. 5.....	58	
	Officers' quarters No. 6.....	98	
	Barracks No. 11.....	68	
	Barracks No. 12.....	137	
	Barracks No. 13.....	189	
	Barracks No. 14.....	47	
	Mess-rooms and kitchens No. 15.....	38	
	Guard-house.....	4	
	Mess-hall and kitchen No. 18.....	38	
	Bakery.....	10	
	Office building.....	1	

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued

DIVISION OF THE MISSOURI—Continued.

DEPARTMENT OF THE PLATTE—Continued.

Post.	Buildings.	Cost.	Total.
Totten—Continued	Wagon-shed.....	\$238	
	Stable.....	8	
	Granary.....	28	
			\$1,278
Yates.....	17 sets officers' quarters and 1 barrack repaired.	1,349	
	Coal-shed (built).....	260	
			1,609
	Total Department of Dakota		30,243

DEPARTMENT OF THE PLATTE.

Cheyenne depot	Depot quartermaster's building	334	
	Depot commissary's building	475	
	Ordinance officer's building.....	173	
	Paymaster's building.....	309	
	Clerks' quarters	71	
	Ordinance shop.....	389	
	Ordinance store-house.....	380	
	Ordinance barracks.....	123	
			\$2,344
Niobrara.....	Privies (built).....		
	14 sets officers' quarters repaired.....		
	Old barracks repaired.....		
Steele.....	Officers' quarters No. 1.....	16	
	Officers' quarters No. 2.....	37	
	Officers' quarters No. 3.....	15	
	Officers' quarters No. 4.....	27	
	Officers' quarters No. 5.....	8	
	Officers' quarters No. 6.....	11	
	Officers' quarters No. 7.....	12	
	Officers' quarters No. 8.....	9	
	Officers' quarters No. 9.....	23	
	Barracks No. 1.....	119	
	Barracks No. 2.....	144	
	Barracks No. 3.....	135	
	Guard-house.....	169	
	Bakery.....	450	
	Office.....	54	
	Chapel and school.....	384	
	Quartermaster's buildings.....	30	
			1,643
Bridger.....	Officers' quarters Nos. 1 to 6.....		
	Barracks Nos. 11 and 16.....		
	Post quartermaster-sergeant's quarters		
	Stable.....		
	Band quarters.....		
Robinson	No repairs reported		
Medicine Butte	1 barrack (built)		
	1 store-house (built).....		
	1 guard-house (built).....		
Russell	Work noted in annual report, under "Special projects."		
Omaha depot	Hose-carriage shed.....		
	Wagon-shed.....		
	Wood-shed.....		
	Office and store-house		
	Store-houses.....		
	Watch-house.....		
Fort Omaha	Magazine (built).....	399	
	General repairs	1,270	
			1,669
Sidney.....	Commanding officer's quarters	10	
	Officers' quarters Nos. 1 and 2.....	3	
	Officers' quarters Nos. 3 and 4.....	7	
	Officers' quarters Nos. 5 and 6.....	2	
	Officers' quarters Nos. 8 and 9.....	2	
	Officers' quarters Nos. 10 and 11.....	2	
	Band quarters.....	35	
	Barracks No. 14.....	12	
	Barracks No. 15.....	12	
	Barracks No. 16.....	16	

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

DIVISION OF THE MISSOURI—Continued.

DEPARTMENT OF THE PLATTE—Continued.

Post.	Buildings.	Cost.	Total.
Sidney—Continued	Administration building	\$15	
	Store-house	6	
	Cavalry stable	10	
	Bake-house	30	
	Quartermasters' store-house	275	
	Officers' quarters Nos. 39 and 40	6	
	Guard-house	14	
	Bath-house	2	
	Officers' quarters Nos. 44 and 45	5	
	Non-commissioned staff quarters (built)	900	
	Root-house (built)	166	
			\$1,530
Washakie	Officers' quarters No. 1	65	
	Officers' quarters No. 2	56	
	Officers' quarters No. 3	37	
	Officers' quarters No. 4	74	
	Barracks No. 5	80	
	Barracks No. 6	97	
	Barracks No. 7	108	
	Employees' quarters No. 8	15	
	Employees' quarters No. 9	9	
	Non-commissioned staff quarters No. 10	11	
	Non-commissioned staff quarters (built)	768	
	Bakery	6	
	Guard-house	54	
	Office	5	
	Quartermaster's store-house	3	
	Commissary's store-house	70	
	Quartermaster's stable	22	
	Cavalry stable	24	
	Magazine (built)	367	
	Miscellaneous repairs	97	
			1,978
Douglas	Commanding officer's quarters	90	
	Officers' quarters Nos. 1 to 20	1,153	
	Officers' quarters Nos. 21 and 22	22	
	Officers' quarters Nos. 23 and 24	19	
	Officers' quarters Nos. 25 and 26	22	
	Barracks Nos. 1 to 6	513	
	Barracks Nos. 7 to 10	1,086	
	Band quarters	47	
	Guard-house	18	
	Magazine (built)	379	
	Gun-shed (built)	849	
	Oil-house	8	
	Non-commissioned staff quarters	3	
	Subsistence store-house	17	
	Quartermaster's store-house	57	
	Smith's shop	26	
	Wagon-shed	48	
			4,357
McKinney	Officers' quarters Nos. 1 and 2	21	
	Officers' quarters No. 3	2	
	Officers' quarters Nos. 4 and 5	39	
	Officers' quarters No. 6	9	
	Officers' quarters Nos. 7 and 8	14	
	Officers' quarters No. 10	60	
	Officers' quarters No. 11	31	
	Officers' quarters Nos. 13 and 14	50	
	Officers' quarters No. 15	85	
	Officers' quarters Nos. 16 and 17	42	
	Officers' quarters No. 18	30	
	Officers' quarters Nos. 19 and 20	27	
	Barracks No. 23	111	
	Barracks No. 24	167	
	Barracks No. 25	170	
	Barracks No. 27	168	
	Barracks No. 28	146	
	Barracks No. 29	112	
	Store-house No. 30	30	
	Store-house No. 31	30	
	Subsistence store-house	107	
	Headquarters' building	123	
	Commissary-sergeants' quarters	134	
	Cavalry stable No. 36	32	
	Cavalry stable No. 37	42	
	Smith's shop	39	

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

DIVISION OF THE MISSOURI—Continued.

DEPARTMENT OF THE PLATTE—Continued.

Post.	Buildings.	Cost.	Total.
McKinney—Continued	Bake-house	\$9	
	Granary	4	
	Cavalry stable No. 49	66	
	Cavalry stable No. 50	34	
	Non-commissioned staffs quarters No. 52	25	
	Non-commissioned staffs quarters No. 54	105	
	Guard-house	12	
	Wire fence (built)	609	
			\$2, 685
Laramie	Officers' quarters Nos. 1 and 2	21	
	Officers' quarters No. 3	24	
	Officers' quarters Nos. 4 and 5	216	
	Officers' quarters Nos. 6 and 7	23	
	Officers' quarters Nos. 8 and 9	33	
	Officers' quarters Nos. 10 and 11	28	
	Officers' quarters No. 12	180	
	Officers' quarters No. 13	20	
	Officers' quarters No. 14 and 15	29	
	Officers' quarters Nos. 16 and 17	35	
	Officers' quarters No. 18	14	
	Officers' quarters A	10	
	Administration building (built)	3, 800	
	Granary	200	
	Band and company quarters	34	
	Band and company mess	15	
	Guard-house	21	
	Barracks No. 25	18	
	Barracks and kitchen No. 26	5	
	Barracks and kitchen No. 28	5	
	Wash-house No. 27	3	
	Wash-house No. 29	2	
	Kitchen and mess-room No. 32	13	
	Quartermaster's warehouse	4	
	Sink (built)	500	
	Shop	7	
	Smith's shop	8	
	Stables	35	
	Store-house	3	
	Telegraph office	1	
	Non-commissioned staff quarters	8	5, 315
	Total Department of the Platte		22, 521

RECAPITULATION.

Department of Texas	\$38, 504
Department of the Missouri	44, 457
Department of Dakota	30, 243
Department of the Platte	22, 521
Total Division of the Missouri	135, 725

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

DIVISION OF THE ATLANTIC.

Post.	Buildings.	Cost.	Total.
Warren	Officers' quarters		\$755
	Non-commissioned staff quarters, battery quarters, and battery guard-house, from available material at post		
Wadsworth	None reported		
Saint Francis Barracks	Commanding officers' quarters	\$210	
	Officers' quarters (5 sets)	669	
	Barracks	30	
	Ordnance-sergeant's quarters	48	
	Bath-house	37	
	Sinks (built)	105	
	Surgeon's quarters	90	
	Shed (built)	50	
			1, 230

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

DIVISION OF THE ATLANTIC—Continued.

Post.	Buildings.	Cost.	Total.
Preble	Officers' quarters No. 3.....	\$60	
	Officers' quarters No. 4.....	4	
	Officers' quarters No. 5.....	2	
	Guard-house	4	
	Store-house	3	
	Privy (built).....	90	
	Kitchen No. 9.....	3	
	Battery quarters.....	108	
	Married men's quarters No. 12.....	28	
	Married men's quarters No. 13.....	11	
	Married men's quarters No. 14.....	59	
	Commissary-sergeant's quarters.....	45	
	Ordnance-sergeant's quarters.....	15	
	Office building.....	218	
	Quartermaster's stable	98	
Plattsburg Barracks.....	Officers' quarters No. 1.....		\$748
	Barracks No. 2.....		
	Guard-house		
	Office building.....		
	School building		
	Gun-shed.....		
	Coal-shed.....		
	Non-commissioned staff quarters		
	Magazine		
	Stable		
	Bake-house.....		
Adams	Surgeon's quarters	186	
	Officers' quarters No. 3.....	43	
	Officers' quarters No. 4.....	57	
	Officers' quarters No. 5.....	45	
	Officers' quarters No. 6.....	123	
	Officers' quarters Nos. 7 and 8	8, 247	
	Officers' quarters No. 9.....	4, 123	
	Brick Barracks (built)	21, 653	
	Store-house	24	
	Forage-house	185	
	Non-commissioned staff quarters.....	50	
Mackinac.....	Store house.....	57	34, 736
	Privy (built)	36	
	Non-commissioned staff quarters.....	409	
	Stable	13	
	Inclosing wall.....	121	
	Bath-house (built)	444	
	Other minor repairs		
Madison Barracks.....	Officers quarters No. 1.....	230	1, 080
	Officers quarters No. 2.....	550	
	Barracks No. 3.....	404	
	Barracks No. 4.....	480	
	Store-house.....	56	
	Sinks	72	
	Boat-house	8	
	Non-commissioned staff quarters.....	1, 033	
Ontario	Commanding officer's quarters	190	2, 813
	Officers' quarters No. 1 (west side)	540	
	Officers' quarters No. 2 (east side)	585	
	Officers' quarters No. 2 (west side)	565	
	Store-rooms	43	
	Barracks No. 6.....	359	
	Commissary-sergeant's quarters.....	78	
	Ordnance-sergeant's quarters	83	
	Stable	13	
Mount Vernon Barracks.....	Officers' quarters Nos. 2 and 3.....	3	2, 456
	Officers' quarters Nos. 4 and 5.....	3	
	Converting store-house into officers' quarters	2, 225	
	Store-house No. 8	3	
	Barracks No. 11	777	
	Office building.....	34	
	Bath-house (built)	625	
	Fences	88	
	Flag-staff.....	30	
Little Rock Barracks.....	Officers' quarters No. 2.....	230	3, 786
	Officers' quarters No. 3.....	210	
	Light battery barracks.....	107	

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued

DIVISION OF THE ATLANTIC—Continued.

Post.	Buildings.	Cost.	Total.
Little Rock Barracks—Continued.	Battery E barracks	\$565	
	Office, &c.	20	
	Light battery kitchen	232	
	Officers' quarters No. 11	183	
	Stables	640	
	Sinks	127	
			\$2, 814
Barrancas	Barracks	450	
	Officers' quarters	450	
	Store-houses	100	
			1, 000
Niagara	Company quarters		749
Brady	Officers' quarters		
	Barracks No. 1	172	
	Company kitchen No. 2	101	
	Coal shed	4	
	Officers' quarters No. 5	46	
	Officers' quarters No. 6	187	
	Officers' quarters No. 7	236	
	Laundresses' quarters	5	
	Subsistence store-house	15	
	Quartermaster's store-house (built)	910	
	Dock warehouse	19	
	Stables	34	
	Adjutant's office	20	
	Officers' quarters No. 24	160	
	Non-commissioned staff officers' quarters	3	
			1, 912
Schuyler	Fences	50	
	Officers' quarters	770	
	Administration building	100	
	Commissary sergeant's quarters	80	
			1, 000
Hamilton	Officers' quarters No. 1	4	
	Officers' quarters Nos. 2 and 3	64	
	Officers' quarters No. 6	4	
	Officers' quarters Nos. 11 and 12	140	
	Converting old hospital into 2 sets officers' quarters	3, 045	
	Battery gun-shed	428	
	School-house	28	
	Brick barracks (built)	18, 249	
	Officers' quarters (built)	7, 257	
	Water-closet (built)	450	
			29, 669
Governor's Island	Commanding general's quarters	789	
	Officers' quarters No. 2	116	
	Officers' quarters No. 3	152	
	Officers' quarters No. 4	116	
	Officers' quarters No. 5	201	
	Officers' quarters No. 6	297	
	Officers' quarters No. 7	30	
	Officers' quarters No. 8	31	
	Officers' quarters No. 9	30	
	Officers' quarters No. 10	152	
	Officers' quarters No. 11	260	
	Officers' quarters No. 12	62	
	Officers' quarters No. 13	87	
	Officers' quarters No. 14	53	
	Officers' quarters No. 15	48	
	Officers' quarters No. 16	22	
	Officers' quarters No. 17	84	
	Officers' quarters No. 18	78	
	Headquarters building	917	
	Office building	38	
	Staff officers' office	1, 721	
	Quartermaster's office	45	
	Quartermaster's storehouse	55	
	Stables	27	
	Stables of commanding general	148	
	Coal shed	43	
	Officers' mess, &c.	8	
	Clerks' quarters	82	
	Chapel	5	
			5, 695
Trumbull	Commanding officer's quarters	329	
	Officers' quarters No. 2	90	
	Officers' quarters No. 3	93	

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

DIVISION OF THE ATLANTIC—Continued.

Post.	Buildings.	Cost.	Total.
Trumbull—Continued	Officers' quarters No. 4.	\$93	
	Office building	155	
	Stone barracks	81	
	Frame barracks	177	
	Casemate quarters, Nos. 1 and 2	160	
	Casemate quarters, Nos. 6 and 7	185	
	Casemate quarters, Nos. 8 and 9	185	
	Other repairs made with post labor and material.		
Columbus	Officers' quarters Nos. 1 and 2	94	\$1,548
	Officers' quarters Nos. 3, 4, and 5	91	
	Officers' quarters Nos. 6, 7, 8, 9, and 10	85	
	Barracks No. 4	55	
	Water-closet	220	
Castle William	General repairs		545
Wayne	Officers' quarters	944	187
	Barracks	14	
	Store-house	9	
Porter	Officers' quarters No. 1	17	
	Officers' quarters No. 2	11	
	Officers' quarters Nos. 3 and 5	12	
	Officers' quarters Nos. 4 and 6	19	
	Officers' quarters Nos. 7 and 9	17	
	Office building	5	
	Guard-house	147	
	Non-commissioned staff quarters	8	
	Barracks	102	
	Non-commissioned staff quarters	108	
	Stable	7	
Monroe	Commanding officers' quarters	150	453
	Ordnance store-house	18	
	Officers' quarters No. 3 (brick)	118	
	Ordnance store-house (brick)	37	
	Barracks	160	
	Boiler house	3	
	Mens' library	1	
	"Carroll Hall"	44	
	Officers' recitation room	7	
	Library	1	
	Children's school	8	
	Officers' quarters (frame) No. 14	18	
	Officers' quarters (frame) No. 15	101	
	Officers' quarters (brick) No. 16	1,250	
	Officers' quarters (brick) No. 17	94	
	Officers' quarters (brick) No. 18	61	
	Officers' quarters (frame) No. 19	15	
	Officers' casemates (first front)	44	
	Officers' casemates (second front)	18	
	Officers' casemates (third front)	21	
	Bakery	1	
	Engine-house	1	
	Employes' building No. 28	1	
	Guard-house	8	
	Stables	7	
	Wagon-master's quarters	18	
	Officer's club	320	
	Children's school	4	
	Post-office	1	
	Quartermaster-sergeant's quarters	16	
	Hay scales	1	
	Store-house	1	
	Quartermaster's clerks' quarters	55	
	Post quartermaster's quarters	29	
	Headquarters' office	14	
	Adjutant's office	17	
	Guard-house casemate	2	
	Commissary office	45	
	Adjutant's quarters	131	
	Fences	1	
	Commissary officer's quarters	17	
	Coal-shed (built)	2,824	
	Pump-house	2,330	
	Pagoda	127	
			8,130

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

DIVISION OF THE ATLANTIC—Continued.

Post.	Buildings.	Cost.	Total.
Newport Barracks.....	Administration building	\$9	
	Subsistence store-house.....	5	
	Barracks No. 3	134	
	Guard-house	4	
	Non-commissioned staff quarters.....	2	
	Stable and wagon shed	48	
	Officers' quarters Nos. 8 and 9.....	20	
	Officers' quarters No. 10.....	36	
	Officers' quarters No. 12.....	35	
	Officers' quarters No. 13.....	2	
	Officers' quarters No. 14.....	4	
	Officers' quarters No. 15.....	8	
	Officers' quarters Nos. 17 and 18.....	1	
	Miscellaneous repairs.....	400	
Washington Barracks	Commanding officer's quarters	321	
	Officers' quarters No. 2.....	322	
	Officers' quarters Nos. 6 and 7.....	101	
	Store-rooms, &c.....	15	
	Barracks Nos. 1, 2, and 3.....	325	
	Barracks Nos. 4, 5, and 6.....	294	
	Officers' quarters Nos. 8 and 9.....	105	
	Officers' quarters Nos. 13 and 14.....	13	
	Officers' quarters No. 15.....	28	
	Officers' quarters Nos. 16 and 17.....	100	
	Barrack building converted into officers' quarters.....	10,398	
	Non-commissioned staff and band.....	10	
	Married soldiers' quarters	180	
	Stable and shop.....	118	
	Bake-house	90	
	Post quartermaster-sergeant's quarters.....	175	
Jackson Barracks	Commanding officer's quarters.....	80	
	Officers' quarters No. 2.....	30	
	Officers' quarters No. 3.....	32	
	Officers' quarters No. 4.....	74	
	Officers' quarters No. 5.....	80	
	Non-commissioned staff quarters.....	10	
	Stable.....	20	
	Bakery.....	60	
	Fences.....	571	
			12,595
McHenry.....	Commanding officer's quarters.....	101	
	Officers' quarters No. 5.....	119	
	Officers' quarters No. 6.....	100	
	Officers' quarters No. 7.....	50	
	Officers' quarters No. 9.....	97	
	Officers' quarters No. 10.....	150	
	Quarters No. 12.....	236	
			757
Total Division of Atlantic			853
			116,683

DIVISION OF THE PACIFIC.

DEPARTMENT OF CALIFORNIA.

Presidio of San Francisco....	Officers' quarters (frame) No. 1	\$14
	Officers' quarters (frame) No. 2	1
	Officers' quarters (frame) No. 3	83
	Officers' quarters (frame) No. 5	196
	Officers' quarters (frame) No. 8	36
	Officers' quarters (frame) No. 9	1
	Officers' quarters (frame) No. 10	1
	Officers' quarters (frame) No. 11	81
	Officers' quarters (frame) No. 12	23
	Officers' quarters (frame) No. 14	25
	Officers' quarters (adobe) No. 16	5
	Officers' quarters (adobe) No. 17	3,704
	Post headquarters buildings	104
	Assembly room (built)	1,508
	Officers' quarters (adobe) No. 21	6
	Officers' quarters (frame) No. 22	1
	Guard-house	78
	Division headquarters building.....	2
	Ordnance store-house	1

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

DIVISION OF THE PACIFIC—Continued.

DEPARTMENT OF CALIFORNIA—Continued.

Post.	Buildings.	Cost.	Total.
Presidio of San Francisco ...	Library	\$81	
	Barracks (frame) No. 30	2	
	Barracks (frame) No. 34	1	
	Barracks (frame) No. 37	153	
	Barracks (frame) No. 38	3	
	Bakery	42	
	Cavalry stables (frame)	5	
	Gun-shed	10	
	Band stand	5	
	Commanding general's quarters	565	
	Commanding general's stables	8	
	Non-commissioned staff quarters	218	
	Married soldiers' quarters No. 61	11	
	Married soldiers' quarters No. 65	23	
	Married soldiers' quarters No. 66	14	
	Married soldiers' quarters No. 67	30	
	Married soldiers' quarters No. 68	27	
	Non-commissioned staff quarters No. 69	103	
	Non-commissioned staff quarters No. 70	188	
	Barracks (frame) No. 72	6	
	Barracks (frame) No. 73	6	
	Scale-house	1	
	Barracks built (frame)	3,892	
	Barracks (built, frame)	3,892	
	Officers' quarters (built, frame)	3,405	
	Officers' quarters (built, frame)	3,406	
	Officers' quarters (built, frame)	3,406	
	Water-closet (built, frame)	831	
Fort Bidwell	Commanding officer's quarters	103	\$22, 149
	Officers' quarters Nos. 2 and 3	207	
	Officers' quarters Nos. 4 and 5	207	
	Officers' quarters No. 6	103	
	Officers' quarters No. 7	103	
	Guard-house	37	
	Gymnasium and gallery (built)	350	
	Quartermaster's stables	65	
	Hay-shed (built)	342	
Angel Island	Commanding officer's quarters	141	1, 517
	Officers' quarters Nos. 2 and 3	86	
	Officers' quarters No. 4	58	
	Officers' quarters No. 5	58	
	Officers' quarters Nos. 6 and 7	232	
	Officers' quarters No. 8	58	
	Officers' quarters No. 9	58	
	Officers' quarters	44	
	Officers' quarters	44	
	Officers' quarters	245	
	Store-house No. 1	329	
	Quartermaster's stables (built)	1,428	
	Carpenter shop	180	
	Smith's shop	15	
Fort McDermit, Nev	Kitchen and mess room	241	2, 923
	Company barracks	217	
	Commissary store-house	176	
Alcatraz Island	Officers' quarters No. 1	304	634
	Stable (built)	788	
	Officers' quarters No. 7	119	
	Officers' quarters No. 8	119	
	Officers' quarters No. 9	119	
	Non-commissioned staff quarters No. 12	47	
	Non-commissioned staff quarters No. 13	47	
	Non-commissioned staff quarters No. 14	47	
	Barracks No. 17	250	
	Prison, buildings	250	
	Prison extension (built)	2, 568	
	Prison, kitchen and mess	496	
Diego Barracks	Barracks		5, 154
	Kitchen and mess-room	385	
	Store-house		
	Shops	141	
	Bake-house		
	Powder-house (built)	123	

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

DIVISION OF THE PACIFIC—Continued.

DEPARTMENT OF CALIFORNIA—Continued.

Post.	Buildings.	Cost.	Total.
Fort Scott.....	Store-house (built)	\$1,590	\$1,590
	Guard-house repaired	Not stated.	
Fort Gaston	Bath-house (built)	134	206
	Officers' quarters No. 4 (adobe)	68	
	Quartermaster's store-house	4	
Benicia Barracks	Barracks No. 10	342	2,087
	Barracks No. 11	342	
	Barracks No. 12	342	
	Barracks No. 13	342	
	Chaplain's quarters	124	
	Headquarters building	595	
Fort Halleck.....	Officers' quarters No. 2	36	108
	Officers' quarters No. 3	36	
	Officers' quarters No. 4	36	
Fort Mason.....	Officers' quarters No. 1 (frame)	298	1,085
	Officers' quarters No. 2 (frame)	98	
	Officers' quarters No. 3 (frame)	225	
	Officers' quarters No. 4 (frame)	197	
	Barracks No. 6 (frame)	196	
	Store-houses	71	
	Total Department of California		33,102

DEPARTMENT OF THE COLUMBIA.

Vancouver Barracks	2 sets (frame) officers' quarters (built)	Not stated.	
	1 executive (building)		
Vancouver depot	Department commander's quarters (repaired)	Not stated.	
	Officers' quarters No. 6 (repaired)		
	Officers' quarters No. 28 (repaired)		
	Officers' quarters Nos. 31 and 32 (repaired) ..		
	Officers' quarters No. 33		
	Officers' quarters No. 34		
	Officers' quarters Nos. 36 and 37		
	Officers' quarters No. 40		
	Officers' quarters No. 41		
	Officers' quarters No. 42		
	Officers' quarters No. 45		
	Officers' quarters No. 46		
	Ordinance store-house		
	Quartermaster's corral and sheds		
Vancouver ordnance depot ..	Headquarters building	Not stated.	
	Commanding officer's quarters		
	Store-house		
	Magazine		
Fort Spokane.....	Non-commissioned officers' quarters	\$82	
	Ammunition store-house (built)		
	Commanding officer's quarters		
	Barracks No. 1		
	Barracks No. 2	11	\$607
	Barracks No. 3	4	
	Non-commissioned staff quarters (built)	500	
Fort Townsend.....	Commanding officer's quarters	Not stated.	
	Officers' quarters No. 2		
	Officers' quarters No. 3		
	Officers' quarters No. 4		
	Officers' quarters No. 5		
	Officers' quarters No. 6		
	Barracks No. 7		
	Mess hall and kitchen		
	Store-house		
	Guard-house		
	School and chapel		
	Commissary sergeant's quarters		
	Ordinance sergeant's quarters		
	Stables		
Fort Cœur d'Alene.....	Office buildings		
	Barracks No. 1		
	Barracks No. 2		
	Barracks No. 3		

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

DIVISION OF THE PACIFIC—Continued.

DEPARTMENT OF THE COLUMBIA—Continued.

Post.	Building.	Cost.	Total.
Fort Cœur d'Alene	Barracks No. 4	Not stated.	
	Band quarters		
	Officers' quarters Nos. 1 and 2		
	Officers' quarters Nos. 3 and 4		
	Officers' quarters No. 5		
	Officers' quarters Nos. 6 and 7		
	Officers' quarters Nos. 8 and 9		
	Officers' quarters Nos. 10 and 11		
	Officers' quarters Nos. 12 and 13		
	Officers' quarters Nos. 14 and 15		
	Guard-house		
	Chapel		
	Non-commissioned staff quarters		
	Saw-mill		
	Stables		
	Mess-room and kitchen		
	Teamster's quarters		
Fort Walla Walla	Magazine, built	Not stated.	
	Commanding officer's quarters		
	Officers' quarters Nos. 2 to 6		
	Officers' mess No. 7		
	Transportation agent's quarters		
	Barracks		
	Library and printing-office		
	Office building		
	Sergeants' quarters		
	Guard-house		
	Bakery		
	Quartermaster's stables		
	Sheds		
	2 cavalry stables (built)		
	1 double set officers' quarters (built)		
	2 shops (built)		
Fort Canby	Commanding officer's quarters		
	Officers' quarters Nos. 1, 2, 3, and 4		
	Commissary sergeant's quarters		
	Barracks		
	Wash-house		
	Bakery		
	Guard-house		
Boisé Barracks	Officers' quarters No. 1		
	Officers' quarters No. 2		
	Officers' quarters No. 3		
	Officers' quarters No. 4		
	Quartermaster's store-houses		
	Commissary store-house		
	Commissary-sergeant's quarters		
	Quartermaster-sergeant's quarters		
	Bakery		
	Cavalry barracks		
	Infantry		
			816
	Total Department of the Columbia		1,748

DEPARTMENT OF ARIZONA.

Fort Verde	Officers' quarters No. 1	\$27	
	Officers' quarters No. 2	27	
	Officers' quarters No. 3	27	
	Officers' quarters No. 4	27	
	Officers' quarters No. 5	27	
	Married soldiers' quarters	34	
	Company quarters No. 7	100	
	Company quarters No. 8	100	
	Company quarters No. 9	35	
	Company quarters No. 10	26	
	Corral No. 1	48	
	Corral, quartermaster's	53	
	Corral No. 3	266	
			\$797

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

DIVISION OF THE PACIFIC—Continued.

DEPARTMENT OF ARIZONA—Continued.

Post.	Buildings.	Cost.	Total.
Lowell.....	No repairs reported.		
Huachuca	3 frame stables, completed		
	Guard-house		
	Stable		
	Shops		
	Mess-room		
	Corral		
	Sheds		
	Privies	174	
	Barracks		
	Officers' quarters	450	
	Administration building		
	Oil-house		
			\$3, 270
			174
			450
			\$3, 894
Thomas	No repairs reported.		
Grant.....	1 double set officers' quarters (built)	2, 078	
	1 cavalry corral	1, 138	
	Officers' quarters (repaired) No. 1	148	
	Officers' quarters Nos. 5 and 6	292	
	Officers' quarters Nos. 7 and 8	319	
	Officers' quarters Nos. 10 and 11	819	
	Officers' quarters No. 9	145	
	Cavalry corral	1, 000	
	Quartermaster's corral	200	
	Store-house	619	
			6, 254
McDowell	Quartermaster-sergeant's quarters (built)		1, 188
Mojave	Commanding officer's quarters	29	
	Officers' quarters No. 2	10	
	Officers' quarters No. 3	22	
	Officers' quarters No. 4	22	
	Officers' quarters No. 5	384	
	Sergeant's quarters	54	
	Hose-house	23	
	Stables and corral	118	
			626
Apache.....	Barracks Nos. 12, 13, 14, 15 (repaired)		
	Store-house		
	Office building		
	Administration building		
	Granary		
	Bakery (built)		
	Non-commissioned officers' quarters		
Whipple Barracks.....	Commanding officer's quarters	7	
	Officers' quarters No. 4	4	
	Officers' quarters No. 5	5	
	Adjutant's office	13	
	Cavalry stables	254	
	Barracks No 16	48	
	Commissary store-house	17	
	Non-commissioned staff and band quarters ..	55	
	Barracks No. 24	22	
			425
Department headquarters ...	Commanding general's quarters	1, 014	
	Acting inspector-general's quarters	392	
	Paymaster's quarters	224	
	Medical director's quarters	269	
	Assistant adjutant-general's quarters	173	
	Chief quartermaster's quarters	354	
	Chief commissary subsistence quarters	568	
	A. A. D. C. quarters	496	
	Headquarters building	566	
	Assistant quartermaster's quarters	213	
	Engineer officer's quarters	30	
	Store-house No. 16	68	
	Smith's shop	81	
	Stables	46	
	Engine-house	219	
	Teamster's quarters	16	
			4, 719
Lewis.....	Barracks No. 1	68	
	Barracks No. 2	46	
	Barracks No. 3	46	
	Barracks No. 4	46	
	Barracks No. 5	52	
	Barracks No. 6	59	
	Barracks No. 7	51	

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

DIVISION OF THE PACIFIC—Continued.

DEPARTMENT OF ARIZONA—Continued.

Post.	Buildings.	Cost.	Total.
Lewis—continued	Barracks No. 8	\$83	
	Officers' quarters No. 11	118	
	Officers' quarters No. 15	92	
	Officers' quarters No. 16	101	
	Officers' quarters No. 17	50	
	Officers' quarters No. 18	227	
	Officers' quarters No. 19	50	
	Officers' quarters No. 20	230	
	Officers' quarters No. 21	92	
	Officers' quarters No. 22	70	
	Officers' quarters No. 23	79	
	Store-house No. 30	18	
	Store-house No. 31	10	
	Guard-house	37	
	Stables	46	
	Teamster's quarters	25	
	Smith's shop, &c. (built)	595	
	Saw-mill	52	
	Non-commissioned staff's quarters	25	
	Cavalry stables (built)	313	
	Paint-shop	92	
	Pump-house	395	
	Granary	1,000	
			\$4,189
Bliss	Officers' quarters No. 1	2	
	Officers' quarters No. 2	2	
	Officers' quarters No. 3	2	
	Officers' quarters No. 4	3	
	Barracks		
	Store-room		
	Offices	340	
	Reading-room		
	Granary		
	Shops	120	
	Sheds		
Stanton	Stalls, &c.		469
	Commanding officer's quarters	70	
	Officers' quarters No. 2	77	
	Officers' quarters No. 3	75	
	Officers' quarters No. 5	95	
	Barracks No. 6	110	
	Offices	68	
	Barracks No. 9	50	
	Barracks No. 10	174	
Santa Fé	Officers' quarters No. 13	79	
	Officers' quarters No. 4	10	
	Barracks No. 10	273	
	Guard-house	24	
	Headquarters building	73	
	General repairs	87	
Wingate			1,098
	Commanding officer's quarters	17	
	Officers' quarters Nos. 2 and 4	61	
	Officers' quarters Nos. 3 and 5	42	
	Officers' quarters Nos. 6 and 8	48	
	Officers' quarters Nos. 7 and 9	69	
	Officers' quarters Nos. 10 and 12	46	
	Officers' quarters Nos. 11 and 13	69	
	Officers' quarters Nos. 14 and 16	43	
	Officers' quarters Nos. 15 and 17	43	
	Officers' quarters No. 19	35	
	Chapel and school-room (built)	2,000	
	Officers' quarters Nos. 21 and 22	34	
	Offices	18	
	Barracks	48	
Fort Union	Officers' quarters (bought)	3,500	
			457
	Officers' quarters No. 1	29	
	Officers' quarters No. 2	35	
	Officers' quarters No. 3	28	
	Officers' quarters No. 4	29	
	Officers' quarters No. 5	65	
	Officers' quarters No. 6	41	
	Officers' quarters No. 7	47	
	Officers' quarters No. 8	36	
			6,073

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

DIVISION OF THE PACIFIC—Continued.

DEPARTMENT OF ARIZONA—Continued.

Post.	Buildings.	Cost.	Total.
Fort Union—Continued.....	Officers' quarters No. 9.....	\$24	
	Barracks No. 10.....	63	
	Barracks No. 11.....	56	
	Barracks No. 12.....	22	
	Barracks No. 13.....	76	
	Barracks No. 14.....	58	
	Barracks No. 15.....	74	
	Prison No. 16.....	22	
	Guard-house No. 18.....	22	
	Ice-house.....	3	
	Barracks No. 20.....	60	
	Barracks No. 21.....	57	
Depot	Officers' quarters No. 1.....	75	
	Officers' quarters No. 2.....	83	
	Officers' quarters No. 3.....	29	
	Office building No. 4.....	27	
	Officers' quarters No. 5.....	40	
	Officers' quarters No. 6.....	27	
	Shops.....	69	
	Store-house No. 8.....	35	
	Store-house No. 9.....	27	
	Store-house No. 10.....	21	
	Store-house No. 11.....	23	
	Store-house No. 12.....	30	
	Boiler-house.....	7	
	Teamsters' quarters.....	2	
	.....do.....	1	
	Ice-house.....	20	
	Commissary-sergeant's quarters.....	14	
	Stables.....	14	
	Fence, &c.....	38	
	General repairs.....	34	
Selden	Barracks No. 1.....	304	\$1,453
	Officers' quarters No. 5.....	99	
	Sergeants' quarters.....	68	
Bayard	Officers' quarters No. 1.....	20	471
	Officers' quarters No. 2.....	20	
	Officers' quarters No. 3.....	20	
	Officers' quarters No. 4.....	20	
Bayard	Officers' quarters No. 5.....	20	
	Officers' quarters No. 6.....	33	
	Officers' quarters No. 7.....	50	
	Officers' quarters No. 8.....	20	
	Officers' quarters No. 9.....	20	
	Officers' quarters No. 10.....	20	
	Officers' quarters No. 11.....	20	
	Officers' quarters No. 12.....	20	
	Officers' quarters No. 13.....	20	
	Barracks No. 8.....	54	
	Barracks No. 9.....	54	
	Barracks No. 10.....	54	
	Barracks No. 11.....	54	
	Barracks (built).....	3,100	
	Officers' quarters No. 14.....	70	
	Officers' quarters No. 16.....	51	
	Band quarters (built).....	2,800	
			6,520
	Total Department of Arizona		88,643

RECAPITULATION.

Department of California	\$33,102
Department of the Columbia	1,748
Department of Arizona	88,643
Total Division of the Pacific	78,493

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

RECRUITING STATIONS.

Depot.	Designation.	Cost.	Total.
Jefferson Barracks	Officers' quarters No. 2.....	\$883	
	Office building (casual repairs)		
	Officers' quarters No. 4 and depot library	1,840	
	Barracks No. 5.....	3,742	
	Barracks No. 6.....	3,742	
	Laundry building purchased	9,000	
			\$18,707
Davids' Island.....	Commanding officer's quarters No. 1	892	
	Officers' quarters No. 2.....	840	
	Officers' quarters No. 3.....	824	
	Officers' quarters No. 4.....	787	
	Officers' quarters No. 5.....	789	
	Officers' quarters No. 6.....	845	
	Officers' quarters Nos. 7 and 8 (built)	11,264	
	Administration building	196	
	Depot detachment building	100	
	Married non-commissioned officers' quarters ..	54	
	Barracks, Company A.....	1,398	
	Mess house, Company B.....	536	
	Barracks, Company B.....	1,398	
	Mess hall, Company B.....	536	
	Barracks, Company C.....	1,364	
	Mess hall, Company C.....	589	
	Barracks, Company D.....	1,400	
	Mess hall, Company D.....	589	
	Guard-house	7	
	Company bath-house.....	854	
	Laundry	78	
	Laundress's quarters	7	
	Band sergeant's quarters.....	6	
	Subsistence store-house	43	
	Bakery.....	19	
	Commissary-sergeant's quarters	40	
	Quartermaster's stables	37	
	Chief musician's quarters	32	
	Quartermaster's store-house	51	
	Quartermaster's shops	21	
	Wash-house	4	
	Coal-shed.....	597	
	Smith's shop (built)	159	
	Post quartermaster-sergeant's quarters (built) ..	1,420	
	Magazine (built)	770	
	Mess hall and kitchen (in course of construction)	20,000	
			48,546
Columbus Barracks.....	Surgeon's quarters	126	
	Officers' quarters, No. 3.....	220	
	Officers' quarters, No. 4.....	248	
	Band and recruiting quarters.....	497	
	Quarters Companies A and C.....	464	
			1,555
	Total recruiting stations		68,808

INDEPENDENT POSTS AND DEPOTS.

Willets Point.....	Officers' quarters Nos. 2 and 3.....	\$324	
	Officers' quarters Nos. 4 and 5.....	12	
	Officers' quarters Nos. 6 and 7.....	12	
	Officers' quarters No. 10.....	369	
	Officers' quarters Nos. 11 and 12.....	14	
	Headquarters building	25	
	Steward's quarters	25	
	Sergeant-major's quarters.....	3	
	Battery quartermaster-sergeant	4	
	Commissary-sergeant	4	
	Barracks No. 20	1,490	
	Barracks No. 22	1,630	
	Barracks No. 23	1,568	
	Kitchen and mess-room.....	635	
	Quartermaster's office and store-room	86	
	Commissary store-room.....	108	
	Quartermaster's stables.....	1	
	Reading-room.....	39	
	School and library	153	
	Married soldiers' quarters.....	26	
	Officers' quarters (built).....	11,887	
			\$18,425

A.—Statement compiled from reports showing expenditures for repairs, &c.—Continued.

INDEPENDENT POSTS AND DEPOTS—Continued.

	Designation.	Cost.	Total
Saint Louis clothing depot...	Warehouse No. 1.....	\$165	
	Warehouse No. 2.....	8	
	Warehouse No. 3.....	87	
	Warehouse No. 4.....	189	
	Warehouse No. 10.....	199	
	Warehouse No. 6.....	91	
	Warehouse No. 7.....	8	
	Employés' quarters No. 8.....	49	
	Store-house No. 9.....	11	
	Employés' quarters No. 10.....	29	
	Employés' quarters No. 11.....	49	
	Warehouse No. 12.....	17	
	Quartermaster's quarters.....	816	
	Quarters No. 14.....	60	
	Quarters depot quartermaster.....	1, 186	
	Cottage No. 17.....	68	
	Store-house No. 18.....	15	
	Store-house No. 19.....	27	
	Stable No. 20.....	6	
	Warehouse No. 21.....	8	
	Shed No. 22.....	27	
			\$3, 315
Total independent posts and depots.....			21, 740

GENERAL RECAPITULATION.

Division of the Missouri.....	\$135, 726
Division of the Atlantic.....	116, 688
Division of the Pacific.....	78, 493
Recruiting stations.....	63, 898
Independent posts and depots.....	21, 740
Total as far as reported.....	421, 454

B.—Statement showing location, purpose, and cost of property rented by the Quartermasters' Department, and in service June 30, 1886, together with amounts paid at that time for commutation of quarters for general-service men.

[From records of the Quartermaster-General's Office.]

Post.	Designation.	Monthly cost.	Yearly cost.
Fort Brady.....	Quarters for post quartermaster sergeant.....	\$10 00	\$120 00
Fort Niagara.....	do.....	10 00	120 00
Little Rock, Ark.....	do.....	12 00	144 00
	Quarters for hospital steward.....	13 00	156 00
	Quarters for commissary-sergeant.....	13 00	156 00
Madison Barracks.....	do.....	10 00	120 00
Saint Francis Barracks.....	Quarters for 1 Lieutenant.....	24 00	288 00
Governor's Island.....	Commutation of quarters for 16 general-service clerks and 1 messenger.....	346 00	4, 152 00
New Orleans.....	Storehouse for quartermaster and subsistence department.....	150 00	1, 800 00
	Offices for quartermaster, subsistence, and pay department.....	90 00	1, 080 00
Baltimore.....	do.....	83 33½	1, 000 00
Boston.....	Offices for quartermaster, subsistence, pay, and ordnance departments.....	95 00	1, 140 00
Buffalo.....	Offices for quartermaster and pay departments.....	65 33½	784 00
Detroit.....	Offices for pay department.....	25 00	300 00
Atlanta.....	do.....	25 00	300 00
	Offices for assistant quartermaster.....	25 00	300 00
Fort Brady.....	Target grounds.....	8 33½	100 00
Fort McHenry.....	do.....	2 08½	25 00
Fort Preble.....	do.....	12 50	150 00
Fort Trumbull.....	do.....	4 16½	50 00
Little Rock Barracks.....	do.....	4 16½	50 00
Madison Barracks.....	Target grounds for season.....		375 00
Frankford Arsenal.....	Office for medical department.....	24 00	288 00

B.—Statement showing location, purpose, and cost of property rented, &c.—Continued.

Post.	Designation.	Monthly cost.	Yearly cost.
Saint Louis.....	Commutation of quarters for mounted recruiting service:		
	2 messengers, 1 sergeant, and 3 privates.....	\$104 00	\$1,248 00
	Office and warehouse for medical department..	225 00	2,700 00
	Office and warehouse for subsistence department.	150 00	1,800 00
	Quarters for attending surgeon.....	20 00	240 00
	1 store and 8 office rooms for superintendent of U. S. Army education, the pay and quartermaster departments.	245 83½	2,950 00
	Corral for subsistence department.....	35 00	420 00
	Stable for quartermaster's department.....	65 00	780 00
San Antonio.....	Commutation of quarters for 1 hospital steward, 11 general service, 2 topographical assistants, and 6 messengers.	354 00	4,248 00
	Rooms for 2 commissary sergeants.....	24 00	288 00
	Rooms for veterinary surgeon.....	12 00	144 00
	Commutation of quarters for recruiting sergeant.	12 00	144 00
	Office rooms for 3 paymasters.....	82 50	990 00
	Rent of drill ground.....	50 00	600 00
Edinburg.....	Store-room.....	15 00	180 00
Concho.....	Site of post.....	200 00	2,400 00
Davis.....	do.....	75 00	900 00
Stockton.....	do.....	106 66½	1,280 00
Santa Maria.....	do.....	6 25	75 00
Pena Colorado.....	do.....	50 00	600 00
Langtry.....	do.....	8 33½	100 00
Eagle Pass.....	do.....	50 00	600 00
Leavenworth.....	Commutation of quarters for 15 general-service clerks and messengers.	375 00	4,500 00
	Office for paymasters.....	50 00	600 00
Denver.....	Office for quartermaster and subsistence department.	60 00	720 00
Caldwell.....	Office for quartermaster's agent.....	15 00	180 00
Harold.....	do.....	15 00	180 00
	Corrals for public animals.....	5 00	60 00
Dodge City.....	Ware-room for quartermaster's agent.....	10 00	120 00
	Corral for public animals.....	25 00	300 00
Pierre, Dak.....	Office, quartermaster.....	20 00	240 00
Sioux City.....	Office, paymaster.....	25 00	300 00
Helena.....	Offices and store-house and stable.....	88 00	1,056 00
Custer Station.....	Store-house.....	75 00	900 00
Snelling.....	Commutation of quarters for 1 private and 5 general-service clerks.	115 00	1,380 00
New York.....	Stable for quartermaster's department.....	137 50	1,650 00
	"Army building".....	2,083 33½	25,000 00
	Commutation of quarters for 13 general-service men.	224 00	2,688 00
San Francisco.....	Offices, store-houses of pay, medical, subsistence, and quartermaster's department.	833 33½	10,000 00
	Post quartermaster sergeant.....	21 00	252 00
	Oil store-room.....	80 00	960 00
Louisville.....	Office.....	20 00	240 00
Washington.....	Rent of square 232.....	125 00	1,500 00
	Rent of lot 9 and 10, square 231.....	20 33½	244 00
	Rent of stable for Lieutenant-General.....	45 00	540 00
	Commutation of quarters for 1 hospital steward, 6 messengers and 9 clerks.	315 00	3,780 00
Cold Spring.....	Office for ordnance officer.....	10 00	120 00
West Point.....	Commutation of quarters for 4 general-service clerks.	84 00	1,008 00
Jeffersonville.....	Stable.....	10 00	120 00
David's Island.....	Stable on main land.....	8 00	96 00
Vancouver barracks.....	Commutation of quarters for 1 hospital steward, 10 general-service clerks, 2 topographical assistants, and 5 messengers.	323 00	3,876 00
Portland.....	Office for quartermaster and paymaster.....	115 00	1,380 00
	Store-room.....	50 00	600 00
Spokane Falls.....	Store-room.....	25 00	300 00
Walla Walla.....	Office for paymaster.....	25 00	300 00
Seattle.....	Quarters for troops and officers.....	430 00	5,160 00
Philadelphia.....	Building for quartermaster's department.....	81 25	975 00
	Office for attending surgeon.....	18 00	216 00
	Office for ordnance officer.....	18 00	216 00
	Stable for quartermaster's department.....	41 66½	500 00
Department headquarters, Santa Fé.....	Commutation for 6 general-service clerks and 3 messengers.	156 00	1,872 00
Santa Fé.....	Quarters for commissary-sergeant.....	15 00	180 00
	Quarters for sergeant-major.....	10 00	120 00

B.—Statement, showing location, purpose, and cost of property rented, &c.—Continued

Post.	Designation.	Monthly cost.	Yearly cost.
Santa Fé—Continued	Quarters for quartermaster-sergeant	\$10 00	\$120 00
	Quarters for chief musician	20 00	240 00
	Quarters for hospital steward	15 00	180 00
Lava	Office for quartermaster's agent	15 00	180 00
El Paso	Office for paymaster	25 00	300 00
Deming	Store-house	30 00	360 00
Fairview	Stable	50 00	600 00
Lepar	Office	15 00	180 00
Chicago	Store-house	75 00	900 00
	Commutation of quarters for 21 general-service men	375 00	4,500 00
	Offices and printing office	1,110 00	13,320 00
Ash Fork	Office and store-room for subsistence department	275 00	3,200 00
	Quartermaster's stables	125 00	1,500 00
	Barn	25 00	300 00
Benson	Office quartermaster's agent	15 00	180 00
Bowie Station	do	20 00	240 00
	do	20 00	240 00
	Office assistant-commissary of subsistence	15 00	180 00
Holbrook	Store-room for subsistence department	20 00	240 00
	Store-room for quartermaster's department	15 00	180 00
	Office quartermaster's agent	6 00	72 00
Hackberry	Store-room	15 00	180 00
Huachuca	Telephone office	5 00	60 00
Tucson	Office for pay department	70 00	840 00
	Stable for quartermaster's department	12 50	150 00
	Commutation of quarters for 17 general-service men and 3 messengers	387 00	4,644 00
Headquarters Department and Division, Presidio. San Diego Barracks	2 buildings for hospital	40 00	480 00
	Quarters for 6 officers	204 00	2,448 00
	Commutation of quarters for 1 hospital steward, 11 general-service clerks, 2 topographical assistants, and 6 messengers	354 00	4,248 00
Department headquarters at Omaha	Office and record rooms	390 00	4,680 00
	Stable lot	16 66½	200 00
	Office of paymaster	30 00	360 00
Salt Lake City	Officers' quarters and barracks	159 00	1,908 00
Ogden	Quartermaster's warehouse and office	25 00	300 00
Carter	Quartermaster's warehouse	16 66½	200 00
Chadron	do	30 00	360 00
Fort Omaha	Rifle range	35 00	420 00
Camp Medicine Butte	Quarters for 2 captains and 2 lieutenants	120 00	1,440 00
Total		13,362 00	160,344 00

6.—Report of Lieut. Col. C. G. Sawtelle, deputy quartermaster-general, U. S. A., of the operations of the Quartermaster-General's Office pertaining to transportation, regular and miscellaneous supplies, contracts and purchases, and miscellaneous claims and accounts, during the fiscal year ending June 30, 1886.

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., October 1, 1886.

GENERAL: I have the honor to submit the following report of the operations of this office pertaining to transportation, regular and miscellaneous supplies, contracts and purchases, and miscellaneous claims and accounts, during the fiscal year ending June 30, 1886:

TRANSPORTATION.

During the year the Quartermaster's Department has provided transportation by rail, water, wagon, and stage for 236,180 persons (including 200,662 persons transported or ferried by Government vessels), 7,907 animals, and 160,191.63 tons of material, as exhibited in statement hereto appended marked A.

The expenditure for this service out of the appropriation "Transportation of the Army," as reported by disbursing officers and as settled by the accounting officers of the Treasury, will aggregate \$1,242,195.31, of which \$266,401.38 has been paid for the transportation of persons, and \$975,793.93 for the transportation of live stock and freight; \$337,258.27 was still due on outstanding accounts not settled at the close of the fiscal year.

The transportation expenses of the Army are not, however, limited to payments for the carriage of persons and property from point to point; they embrace also the payments made for the services of civilian employes and enlisted men on extra duty engaged in the transportation service; for purchasing, operating, and maintaining vessels, and for chartering and repairing the same; for purchasing and repairing means of transportation; for the purchase and care of draft animals and the purchase and repair of harness; for water supply and sewerage, including the digging of wells, water rent and taxes, purchasing material, constructing and repairing; for constructing and repairing wharves and bridges, and for rent of wharves and wharfage; for constructing and repairing roads, and removing obstructions from harbors and rivers; for tolls on turnpikes, ferries, and bridges; for advertisements, publications, and printing in connection with the transportation service, and for other expenses incident to the movements of troops and military property.

During the fiscal year the sum of \$1,501,125.58 was required to meet legitimate liabilities incurred on account of the needs of the Army indicated by these terms, of which \$1,379,547.11 had been paid, and \$121,578.47 was due to creditors on June 30, 1886, making the total cost of the transportation service chargeable to the appropriation "Transportation of the Army" \$3,080,579.16, of which \$458,836.74 remained unpaid at the close of the fiscal year.

The expenses of military transportation not paid out of the appropriation "Transportation of the Army" comprise that provided over the bonded Pacific railroads in value \$488,761.06, which is credited at the Treasury Department on the debts of those railroads, as required by law, and that provided over land-grant railroads, to which 50 per cent. of tariff rates are paid under act of Congress of March 3, 1885 (24 U. S. Stat., 360), making special appropriation of \$125,000 for that purpose.

The larger movements of troops during the year are set forth in the accompanying statement marked B, and may be briefly indicated as follows:

Second Cavalry, Companies A and K, from Department of California to the Department of Arizona.

Third Cavalry, Companies D, H, and K, from the Department of Texas to the Department of Missouri.

Sixth Infantry headquarters from the Department of the Platte to the Department of the Missouri.

Eighth Infantry, Companies A, B, C, D, E, H, and K, from the Department of California to the Department of Arizona.

The exchanges of stations of the First and Eighth and the Second and Fourth Regiments of Infantry, urged by the Lieutenant-General, were deferred by order of the Secretary of War until after the close of the fiscal year for lack of funds, the appropriation for the year having become exhausted by extraordinary expenses, requiring the most rigid economy.

RAILROAD TRANSPORTATION.

Twenty-eight thousand nine hundred and seventeen persons, 7,466 animals, and 71,626 tons of material were transported by railroad under direction of the Quartermaster's Department during the year.

This service has cost (1) by payments out of the appropriation "Transportation of the Army" \$940,494.40, of which \$212,412.64 was for transportation of persons, \$456,556.20 for transportation of live stock and freight, and \$271,525.56 for payment of outstanding accounts at the close of the fiscal year; (2) by credit on account of indebtedness of bonded Pacific railroads \$488,761.06, of which \$153,830.34 was for transportation of persons, and \$334,930.72 for transportation of live stock and freight; (3) by payments to land-grant railroads out of special appropriation for the purpose of \$125,000; total cost to the United States of railroad transportation furnished to the Quartermaster's Department during the year, \$1,554,255.46.

The following is an abstract of payments during the year to railroad and express companies for military transportation out of the appropriation for transportation of the Army, upon accounts settled by disbursing quartermasters stationed throughout the country and through the Quartermaster-General's Office and the accounting officers of the Treasury:

Company.	Paid from appropriation for fiscal year ending June 30—			Total.
	1884.	1885.	1886.	
Adams Express		\$413 26	\$201 15	\$614 41
American Express		6 00	862 70	868 70
Arizona and New Mexico		2 30	255 85	258 15
Arms Palace Horse Car			117 00	117 00
Atchison, Topeka and Santa Fé	\$4,612 16	43,634 40	90,617 21	138,863 77
Atlanta and West Point		6 83	1,016 45	1,023 28
Atlantic and Pacific	5 87	10,269 03	53,296 12	63,570 52
Baltimore and Ohio	87 50	1,555 54	4,703 17	6,346 21
Baltimore and Potomac		56 06	1,204 95	1,261 01
Boston and Albany	523 17	102 05	2,839 69	3,464 91
Boston and Maine		54 57	183 46	238 03
Boston, Hoosac Tunnel and Western			122 50	122 50
Burlington and Missouri River		2,594 20	16 30	2,610 50
California Southern		25	254 96	255 21
Central (street railway)			331 30	331 30
Central Pacific*	93,863 14			93,863 14
Central Vermont		83 78	39 49	123 27
Chesapeake and Ohio		337 26	453 75	791 01
Chicago and Alton	278 76	3,041 20	5,124 02	8,443 98
Chicago and Atlantic			330 46	330 46
Chicago and Grand Trunk		86 92	3,267 09	3,354 01
Chicago and Northwestern		3,628 46	10,093 50	13,721 96
Chicago, Burlington and Quincy		285 95	1,376 21	1,662 16
Chicago, Milwaukee and Saint Paul		1,629 12	10,548 32	12,177 44
Chicago, Rock Island and Pacific		10,115 11	16,903 22	27,018 33
Chicago, Saint Louis and Pittsburgh	65	1,027 17	6,846 98	7,874 75
Chicago, Saint Paul, Minneapolis and Omaha		122 38	2,819 94	2,942 32
Cincinnati, Hamilton and Dayton			103 53	103 53
Cincinnati, New Orleans and Texas Pacific		1 44	222 41	223 85
Cincinnati, Washington and Baltimore		58 02	145 70	203 72
Cleveland, Columbus, Cincinnati and Indianapolis		245 32	959 93	1,205 25
Columbus, Cincinnati and Midland		3 50	1,408 36	1,411 86
Columbus, Hooking Valley and Toledo		5 50	1,772 25	1,777 75
Commercial Express		879 18	2,848 58	3,727 76
Delaware and Hudson Canal		42 60	661 46	704 06
Delaware, Lackawana and Western		58 12	351 11	409 23
Denver and Rio Grande		4,121 67	34,024 95	38,146 62
East Tennessee, Virginia and Georgia	55 00	1,565 02	166 99	1,807 01
Empire Line		1,437 77	3,876 11	5,313 88
Fitchburg		226 29	926 12	1,152 41
Florida Railway and Navigation		116 88		116 88
Fort Worth and Denver City		813 56	6,173 28	6 992 84

*Drafts issued but held in Treasury subject to the order of the Secretary of the Treasury.

Company.	Paid from appropriations for fiscal year ending June—			Total.
	1884.	1885.	1886.	
Fremont, Elkhorn and Missouri Valley.....		\$5,347 92	\$12,830 75	\$18,178 67
Galveston, Harrisburg and San Antonio.....	\$210 17	748 10		958 27
Illinois Central.....		1,295 58	1,225 38	2,520 96
Grand Trunk.....		79 82		79 82
Indiana, Bloomington and Western.....	26 46	2,218 95	1,745 38	3,990 79
Indianapolis and Saint Louis.....		446 36	2,597 30	3,043 66
Jacksonville, Saint Augustine and Halifax River.....		271 12	216 94	488 06
Kansas City, Saint Joe and Council Bluffs.....		549 11	217 88	766 99
Lake Shore and Michigan Southern.....		348 19	3,088 78	3,436 97
Long Island.....		1 30	271 00	272 30
Louisville and Nashville.....	21 98	3,579 53	2,790 05	6,392 44
Manhattan.....		108 67	225 00	333 67
Memphis and Charleston.....		112 90	11 86	124 76
Michigan Central.....			1,506 60	1,506 60
Minneapolis and Saint Louis.....		122 13	325 26	447 39
Missouri Pacific.....	173 86	16,576 18	82,604 53	99,354 57
Morgan's Louisiana and Texas.....	152 35	4,304 63	574 53	5,031 51
New Mexico and Arizona.....	258 50	3,714 20	3,102 69	7,075 43
New York and New England.....		68 93	82 69	151 62
New York Central and Hudson River.....		1,729 59	8,514 15	10,243 74
New York, Chicago and Saint Louis.....		32 82	949 76	982 58
New York City and Northern.....			648 61	648 61
New York, Lake Erie and Western.....		1,106 68	4,408 53	5,515 21
New York, New Haven and Hartford.....		19 97	2,112 95	2,132 92
New York, Ontario and Western.....		87 25	257 83	345 08
New York, Philadelphia and Norfolk.....		116 55	115 37	231 92
New York, West Shore and Buffalo.....		518 60	432 82	951 42
Northern Pacific Railroad and Express.....	525 43	31,368 14	126,847 87	158,741 44
Ohio and Mississippi.....		428 35	7,923 26	8,351 61
Old Colony.....		173 49	361 38	534 87
Oregon Railway and Navigation.....		9,911 87	12,714 12	22,625 99
Pacific Express.....		126 31	652 11	778 42
Pennsylvania.....	59 01	3,283 60	5,887 76	9,230 37
Pennsylvania Railroad.....			10,040 17	10,040 17
Peoples'.....		28 60	115 00	143 60
Philadelphia and Gray's Ferry.....		25 00	75 00	100 00
Philadelphia and Reading.....		114 59	563 01	677 60
Philadelphia Traction.....			180 00	180 00
Philadelphia, Wilmington and Baltimore.....		26 19	481 70	507 89
Pittsburgh, Cincinnati and Saint Louis.....		85 21	1,600 64	1,685 85
Presidio and Ferries.....			1,950 00	1,950 00
Pullman Palace Car.....		1,733 70	3,113 25	4,846 95
Richmond and Danville.....		85 45	59 40	142 85
Rio Grande.....		1,251 99	3,977 94	5,229 93
Rome, Watertown and Ogdensburg.....		19 78	125 10	144 88
Saint Louis and San Francisco.....		1,742 22	6,094 07	7,836 29
Saint Louis, Keokuk and Northwestern.....		50	790 90	791 40
San Antonio Street Car.....			1,500 00	1,500 00
Saratoga, McGregor and Lake George.....			721 76	721 76
Savannah, Florida and Western.....	360 00	1,228 24	291 06	1,523 80
Silver City, Deming and Pacific.....		1,305 98	5,739 25	7,045 23
South Boston.....			231 80	231 80
South Carolina.....		77 97	239 12	317 09
Southern Kansas.....			9,520 54	9,520 54
Southern Pacific (Atlantic System).....		12,419 12	35,882 69	48,301 81
Star Union Line.....		948 32	8,829 89	9,778 21
Texas Pacific.....			887 24	887 24
United States Express.....		7 30	131 82	139 12
Utah Central.....		301 88	3,458 89	3,760 27
Utica and Black River.....		192 80	1,060 65	1,253 45
Vandalia Line.....		208 81	867 98	1,076 79
Virginia, Tennessee and Georgia Air Line.....		2,377 10		2,377 10
Wabash, Saint Louis and Pacific.....		1,271 72	6,691 76	7,963 48
Wells, Fargo and Company's Express.....		346 02	5,758 96	6,104 98
West Shore (New York Central and Hudson River Railroad, lessees).....			927 69	927 69
Western and Atlantic.....			103 96	103 96
Western Maryland.....		1,570 68	29 45	1,600 13
Railroad agents and various corporations to which payments of less than \$100 have been made.....	162 11	588 22	4,170 39	4,920 72
Total.....	100,519 20	205,378 48	668,968 84	974,866 52

BONDED PACIFIC RAILROADS AND THEIR BRANCHES AND LEASED LINES.

Four thousand four hundred and seventy-eight persons, 1,862 animals, and 17,755 tons of material were transported for the department over the bonded Pacific railroads and their branches and leased lines during the year.

The service performed by each road is shown in the following table:

Company.	Number of persons transported.	Number of animals transported.	Pounds of freight transported.
Union Pacific (branches and leased lines)	3,486	1,636	19,120,323
Central Pacific (branches and leased lines)	634	226	16,283,654
Sioux City and Pacific and leased lines	354	.....	106,322
Central Branch Union Pacific	4	.....	263
Total	4,478	1,862	35,510,562

The amounts which will inure for this service to the credit of the respective railroads upon the books of the Treasury, computed at the full rates of their published tariffs, aggregate the sum of \$488,761.06.

The amount inuring to each road is shown in the following table:

Company.	Amount of accounts referred to the Treasury for settlement.	Estimated amount of accounts not rendered.	Proportion inuring for troops.	Proportion inuring for stores.	Total amount.
Union Pacific	\$173,421 45	\$64,495 97	\$79,538 68	\$158,378 74	\$237,917 42
Central Pacific	20 26	.....	.....	20 26	20 26
Southern Pacific	188,872 49	61,000 00	73,647 42	176,225 07	249,872 49
Sioux City and Pacific	692 32	234 28	622 02	304 58	926 60
Central Branch, Union Pacific	17 73	6 56	22 22	2 07	24 29
Total	363,024 25	125,736 81	153,830 34	334,930 72	488,761 06

Of the above amount of \$488,761.06 inuring to these roads, the proportionate amounts accruing over the subsidized and unsubsidized portions of the respective roads are estimated as follows:

Company.	Total amount.	Subsidi- zied.	Unsubsidi- zied.
Union Pacific	\$237,917 42	\$200,029 81	\$31,887 61
Central Pacific	20 26	16 41	3 85
Southern Pacific	249,872 49	30,390 84	219,481 65
Sioux City and Pacific	926 60	865 49	61 11
Central Branch, Union Pacific	24 29	14 02	10 27
Total	488,761 06	237,816 57	251,444 49

The following statement shows the amount of the accounts of the Pacific railroad companies, which, during the year, were prepared by the Quartermaster's Department, acted upon in this office, and referred to the Treasury for settlement, in aggregate amount \$564,292.83:

Company.	Amount received during fiscal year.	Amount referred for settlement during fiscal year.	Amount in Quartermaster-General's Office, June 30, 1886.
Union Pacific.....	\$283,033 24	\$267,435 15	\$15,598 09
Central Pacific.....	21,903 18	21,903 18	-----
Southern Pacific.....	258,542 91	258,542 91	-----
Sioux City and Pacific.....	724 47	724 47	-----
Central Branch Union Pacific.....	89 03	89 03	-----
Total.....	564,292 83	548,694 74	15,598 09

In addition to the above, thirty-six accounts of the Southern Pacific Company, for wood and water furnished United States troops, have been rendered, in amount \$4,923.99, which have been forwarded to the Third Auditor of the Treasury for the action of the accounting officers and decision whether or not these claims are to be held subject to the provisions of the act of Congress of May 7, 1878.

Of the above amount, \$564,292.83, accounts in aggregate amount \$8,928.45 were for transportation performed under provisions of law of July 5, 1884, for other Departments of the Government, as follows:

By what company.	For what Department.			Total.
	Treasury.	Navy.	Interior.	
Union Pacific.....	\$453 99	\$3,475 16	\$344 57	\$4,273 72
Central Pacific.....	81 72	24 41	-----	106 13
Southern Pacific.....	418 60	3,240 62	887 89	4,547 11
Central Branch Union Pacific.....	-----	-----	1 49	1 49
Total.....	954 31	6,740 19	1,233 95	8,928 45

In the Treasury, accounts of these companies, amounting in the aggregate to \$482,909.76, awaited settlement at the close of the fiscal year, to wit:

Of the Union Pacific Railway Company.....	\$203,000 58
Of the Central Pacific Railway Company.....	25,217 26
Of the Southern Pacific Company.....	254,078 86
Of the Sioux City and Pacific Railroad Company.....	613 06

The following statement shows the total settlements upon accounts adjusted in the Quartermaster-General's Office and the Treasury Department for military transportation over these roads, from the date when they were first opened for traffic up to the close of the fiscal year ending June 30, 1886:

	Union Pa- cific.	Central Pa- cific.	Kansas Pa- cific.	Sioux City and Pacific.	Central Branch Union Pa- cific.	Total.
Paid in cash, under act of July 2, 1864.	\$1,693,360 69	\$261,106 21	\$881,733 98	\$3,594 28	.....	\$2,839,795 16
Credited on bonds, under act of July 2, 1864.	1,693,360 87	261,106 29	881,733 37	3,594 29	.....	2,839,794 82
Withheld, under act of March 3, 1873.	3,219,311 09	691,132 83	918,822 53	49,501 12	\$54 18	4,878,821 75
Withheld, under act May 7, 1878.	3,297,152 21	1,821,861 35	.....	.....	.....	5,119,013 56
Withheld and re- ported to Congress.*	.....	505,231 81	.....	.....	.....	505,231 81
Credited, under agreement with company.	108,363 42	.....	30,664 74	8,873 69	76 80	147,978 65
Total.	10,011,548 28	3,540,438 49	2,712,954 62	65,563 38	130 98	16,330,635 75

* Revised Statutes, section 5260. Letter of Secretary of the Treasury. Decision United States Supreme Court, May 10, 1886.

The following statement shows the total number of persons, animals, and pounds of material transported for the Quartermaster's Department over these roads, from the date when they were opened for traffic to the close of the fiscal year ending June 30, 1886.

KANSAS PACIFIC RAILROAD.

Year.	Number of persons.	Number of animals.	Number of pounds of freight.	Year.	Number of persons.	Number of animals.	Number of pounds of freight.
1865.	.....	.....	53,844	1874.	1,176	179	2,116,139
1866.	1	.....	19,748	1875.	1,155	495	4,387,624
1867.	7,467	3,405	18,789,010	1876.	2,860	1,274	9,794,841
1868.	6,160	2,174	31,097,297	1877.	3,602	2,842	6,417,682
1869.	8,530	10,706	19,534,075	1878.	1,126	964	4,411,589
1870.	4,618	2,814	10,090,000	1879.	1,061	558	4,487,419
1871.	4,323	1,240	8,931,930	1880.	1,740	1,257	7,024,237
1872.	3,939	1,267	15,229,340	1881.*	1,698	1,131	8,968,295
1873.	1,951	390	5,711,947				

* Consolidated with the Union Pacific Railroad under the title "Union Pacific Railway Company."

UNION PACIFIC RAILROADS.

1866.	89	.....	.....	1877.	10,347	5,333	61,413,809
1867.	5,283	1,459	7,770,830	1878.	8,757	3,146	37,759,397
1868.	6,669	2,304	40,385,147	1879.	6,556	1,088	44,370,129
1869.	11,401	2,538	22,544,815	1880.	8,227	7,362	53,722,386
1870.	6,512	2,016	17,102,000	1881.	6,162	2,266	53,137,214
1871.	6,945	1,066	23,179,385	1882.	11,691	4,059	57,135,114
1872.	3,645	756	18,745,918	1883.	6,748	1,756	55,391,373
1873.	6,166	1,763	21,697,106	1884.	5,698	1,610	51,600,462
1874.	5,823	1,442	18,723,652	1885.	4,316	893	35,382,424
1875.	5,103	1,744	20,458,199	1886.	2,486	1,636	19,120,323
1876.	6,262	1,597	20,420,292				

CENTRAL PACIFIC RAILROADS.

Year.	Number of persons.	Number of animals.	Number of pounds of freight.	Year.	Number of persons.	Number of animals.	Number of pounds of freight.
1867.....	4	-----	-----	1878.....	3,136	1,754	5,518,340
1869.....	1,908	2	251,438	1879.....	2,688	112	2,908,734
1870.....	2,512	121	1,997,000	1880.....	1,449	574	6,970,415
1871.....	478	418	559,188	1881.....	677	419	17,697,401
1872.....	1,493	127	4,984,980	1882.....	3,787	1,654	27,197,598
1873.....	3,034	63	2,444,211	1883.....	849	695	30,093,076
1874.....	1,199	120	2,797,254	1884.....	447	23	31,009,623
1875.....	957	228	2,008,804	1885.....	554	22	34,523,180
1876.....	1,842	267	2,292,631	1886.....	634	226	16,283,654
1877.....	1,208	290	3,780,954				

SIOUX CITY AND PACIFIC RAILROAD.

1868.....	9	-----	-----	1878.....	524	422	797,552
1869.....	37	-----	-----	1879.....	161	28	383,300
1870.....	47	-----	157,855	1880.....	1,404	3	272,297
1871.....	185	-----	1,003,452	1881.....	616	24	1,345,077
1872.....	243	-----	1,155,306	1882.....	441	63	1,097,683
1873.....	223	36	3,544,054	1883.....	1,351	190	2,279,202
1874.....	325	40	1,625,414	1884.....	227	54	2,104,761
1875.....	275	55	1,420,560	1885.....	142	19	361,568
1876.....	50	2	28,814	1886.....	554	-----	106,322
1877.....	1,278	-----	1,084,095				

The following are the three laws which govern the adjustment of bonded Pacific Railroad accounts for transportation furnished the Quartermaster's Department, viz:

[Act of March 3, 1873, sec. 5260, Rev. Stat.]

The Secretary of the Treasury is directed to withhold all payments to any railroad company and its assigns, on account of freights or transportation over their respective roads of any kind, to the amount of payments made by the United States for interest upon bonds of the United States issued to any such company, and which shall not have been reimbursed, together with the five per centum of net earnings due and unapplied, as provided by law.

This law applies to all the bonded Pacific railroads.

[Act of May 7, 1878, sec. 2, 20 Stat. L., p. 58.]

That the whole amount of compensation which may, from time to time, be due to said several railroad companies respectively for services rendered for the Government shall be retained by the United States, one-half thereof to be presently applied to the liquidation of the interest paid and to be paid by the United States upon the bonds so issued by it as aforesaid, to each of said corporations severally, and the other half thereof to be turned into the sinking fund hereafter provided, for the uses therein mentioned.

This law applies to the Union and Central Pacific Railroads. It does not apply to the Kansas Pacific, the Sioux City and Pacific, or the Central Branch Union Pacific.

[Act of March 3, 1879, 20 Stat. L., p. 420.]

That for the proper adjustment of the accounts of the Union Pacific, Central Pacific, Kansas Pacific, Western Pacific, and Sioux City and Pacific Railroad Companies, respectively, for services which have been or may be hereafter performed for the Government for transportation of the Army, and transportation of the mails, the Secretary of the Treasury is hereby authorized to make such entries upon the books of the Department as will carry to the credit of said companies the amounts so earned, or to be earned, by them during said fiscal year, and withheld under the provisions of section

fifty-two hundred and sixty of the Revised Statutes, and of the act of Congress approved May seventh, eighteen hundred and seventy-eight: *Provided*, That this shall not authorize the expenditure of any money from the Treasury nor change the method now provided by law for the auditing of such claims against the Government: *Provided further*, That this paragraph shall not be construed as to be a disposition of any moneys due, or to become due, to or from said companies, respectively, or to, in any way, affect their rights or duties, or the rights of the United States, under existing laws, it being only intended hereby to enable the proper accounting officers to state upon the books of the Treasury the accounts between the Government and said companies respectively.

This law releases the appropriations for Army transportation from any charges on account of transportation over railroads named, and the amounts found due are not taken from those appropriations, as was done prior to the passage of the law. It will be observed that this law does not apply to the Central Branch Union Pacific Railroad.

Settlement for service over the unsubsidized portions of the Union Pacific Railway, including the Kansas Division (formerly the Kansas Pacific Railway) and the Denver Pacific Railway and Telegraph Company, continues to be made under the provisions of the circular letter of the honorable the Secretary of the Treasury, dated July 21, 1884, the amount being withheld, and under the terms of assignments made by the president of the company to the United States, dated July 25, 1884, and February 17, 1885, applied to the credit of the Union Pacific Railway Company in its sinking fund, established by the act of May 7, 1878.

Settlement for service over the unsubsidized portions of the Central Branch Union Pacific Railroad continues to be made under the terms of the agreement of the company with the United States, made March 31, 1885 (copy hereto attached marked F), and the amount applied to its credit on interest account with the United States.

Settlements for service over the unsubsidized portion of the Sioux City and Pacific Railroad continues to be made under the terms of the agreement of the company with the United States, made May 27, 1885, and the amount applied to its credit on its interest account.

Settlements for service over the unsubsidized portions of the Central Pacific Railroad have been heretofore held subject to the provisions of Treasury circular letter dated January 12, 1884, under which the amounts were certified by the accounting officers and reported to the Secretary of the Treasury, subject to the disposition of Congress.

No action having been taken by Congress in relation to the disposition of the amounts embraced in the settlements held in abeyance, a motion was made by the company before the accounting officers of the Treasury by which, in effect, the revocation of the order of January 12, 1884, and the revival and enforcement of that of June 27, 1883, was requested.

The Second Comptroller in his decision thereon, dated August 28, 1885, stated the result of his review of the statutes and decisions upon the subject, recommending the revocation of the order of January 12, 1884, and that the amounts involved in pending settlements be covered into the Treasury, and one-half thereof applied upon interest account, and the other half credited to the sinking fund, as required by the act of May 7, 1878 (Thurman law); also that hereafter the accounts of the company be adjusted by the accounting officers, the Secretary of the Treasury retaining the whole amount, applying the same in the manner pointed out by that act.

These recommendations were approved by the honorable the Secretary of the Treasury, and the decision of the Second Comptroller was published in Treasury Circular No. 136, dated September 11, 1885, directing the revocation of Department Circular No. 83 of June 27, 1883, and circular letter of January 12, 1884, and that all compensation now due, or which may hereafter become due, the Central Pacific Railroad Company for services rendered the Government, be withheld and applied as indicated in the above decision.

It is understood that, on application of the company, the Secretary of the Treasury consented to suspend action under that part of his order directing the withholdment and application of compensation due, or to become due, the company, upon condition that the matter in issue be presented to the proper courts for judicial decision. In conformity thereto, a petition of the Central Pacific Railroad Company against the United States, No. 14711, was filed in the United States Court of Claims November 24, 1885, embracing certain accounts of the company, including charges for transportation services rendered on certain of the railroad lines owned and leased by the company, being lines, or parts of lines, unaided by the United States.

Mileage of roads owned and operated by the Central Pacific Railroad Company:

California and Oregon Railroad, Roseville to Delta.....	190.08
Western Pacific Railroad, Niles to Oakland.....	24.31
San Joaquin Valley Railroad, Lathrop to Goshen.....	146.08
San Francisco, Oakland and Alameda Railroad, local connections.....	23.20
	<hr/> 383.67

Mileage of roads leased, controlled, and operated by the Central Pacific Railroad Company.

Sacramento and Placerville, Sacramento to Brighton.....	5.64
Stockton and Copperopolis, Stockton to Milton, and Peters to Oakdale.....	49.00
Northern Railway, including San Pablo and Tulare Railroad, viz, Northern Railway, West Oakland to Delaware street, Cal.; Mar- tinez extension, Woodland to Williams.....	74.80
San Pablo and Tulare Railroad, Martinez to Tracy, Port Costa to Suisun, Williams to Tehama.....	125.34
	<hr/> 200.14
California Pacific Railroad, San Francisco to Sacramento, Napa Junction to Calistoga, Danville to Knight's Landing*.....	139.69
Less ferry abandoned.....	24.25
	<hr/> 115.44

Southern Pacific Railroad of Colorado:

Huron to Colorado River.....	528.61
Los Angeles to Wilcox.....	21.64
Mojava to Needles.....	240.13
	<hr/> 790.38

Los Angeles and San Diego Railroad:

Florence to Santa Anna.....	27.60
Amador Branch Railroad, Galt to Ione.....	27.05
Berkeley Branch Railroad, Shellmound to Berryman.....	3.83
Los Angeles and Independence Railroad, Los Angeles to Santa Monica.....	16.83
Western Development Company, bridge over Colorado River..	.13
Southern Pacific Railroad of Arizona, Colorado River to New Mexico boundary.....	383.21
Southern Pacific Railroad of New Mexico, New Mexico bound- ary to west bank of Rio Grande.....	168.26
Pacific Improvement Company, bridge over Rio Grande.....	.23
Galveston, Harrisburg and San Antonio Railroad, east bank Rio Grande to El Paso.....	3.61
	<hr/> 1,791.35

Total number of miles of unaided road..... 2,178.02

* Part of this line by ferry from San Francisco to Vallejo, 26.25 miles, was abandoned after May 7, 1878, and ferry from Vallejo, 2 miles, substituted.

Action was brought by the railroad company under its construction of section 2, act of May 7, 1878, to recover compensation for services performed for the United States in transportation over those portions of the railroad above mentioned, in the building of which it had not been aided by the Government, and therefore not embraced in the above-named act.

The United States filed a general demurrer, on the ground that the whole of said compensation is required to be retained under the provisions of the second section of the act of May 7, 1878, chapter 96, Thurman act. (20 Stat. L., p. 58.)

The decision of the court was that the provisions of the act applied only to services on the aided portions of the road, and the demurrer was overruled.

An appeal was taken by the United States to the Supreme Court of the United States (No. 1291, October term, 1885) and decision rendered May 10, 1886, sustaining the railroad company in its construction of the second section of act of May 7, 1878, that cash payment for service over the unsubsidized roads should be made by the United States.

Upon June 4, 1886, circular letter was issued by the Acting Secretary of the Treasury, inviting the attention of the accounting officers of the Treasury Department to the above decision, and directing that hereafter the accounts and claims of the company for such services will be settled, adjusted, and paid in conformity to such decision, and that all Department circulars heretofore issued upon the subject are modified accordingly.

On the suggestion of the honorable the Secretary of the Treasury, and by direction of the honorable the Secretary of War, the Quartermaster-General, on June 7, 1886, submitted estimates of appropriations required to execute the decision of the Supreme Court, aggregating \$906,314.42. (See Ex. Doc. No. 270, Forty-ninth Congress, first session.)

The appropriation was, however, refused by Congress. (See House Report No. 3107, Forty-ninth Congress, first session.)

In view of the circumstances here reported, and the fact that the estimates upon which the regular appropriation of the Quartermaster's Department, entitled "Transportation of the Army," was based, carefully excluded any provision for payment of money to the bonded Pacific railroads, for the reason that the laws, as interpreted by the accounting officers of the Treasury and the Department of Justice, at the time of the preparation of the estimates, prohibited any payment to these companies, it is thought that the Army transportation appropriation should not be used in payment of any accounts of these companies, but that a special appropriation from Congress for the purpose should be secured.

As a matter of fact, the appropriation for transportation of the Army will be hardly sufficient to meet the legitimate demands of the service as contemplated in the preparation of the estimates of the amount needed for the purpose.

LAND-GRANT RAILROADS.

The sum of \$125,000 was appropriated for payments for military transportation performed during the fiscal year over certain land-grant railroads in the act approved March 3, 1885, making appropriations for the support of the Army, in the following terms, to wit:

For the payment for Army transportation lawfully due such land-grant railroads as have not received aid in Government bonds, to be adjusted by the proper accounting

officers in accordance with the decision of the Supreme Court in cases decided under such land-grant acts, but in no case shall more than 50 per centum of the full amount of the service be paid, \$125,000: *Provided*, That such compensation shall be computed upon the basis of the tariff rates for like transportation performed for the public at large, and shall be accepted as in full for all demands for said service.

The following is a statement showing payments made during the fiscal year ending June 30, 1886, for military transportation over land-grant railroads, upon accounts adjusted in the Quartermaster-General's Office and settled through the accounting officers of the Treasury, being 50 per centum of the tariff rates for like transportation performed for the public at large, as prescribed by the laws appropriating money for their payment:

Name of company.	For services during fiscal year ending June 30—			Total.
	1884.	1885.	1886.	
Atlantic and West Point *			\$6 38	\$6 38
Atchison, Topeka and Santa Fe.....	\$11 517 19	\$31,027 05	30,478 18	73 022 42
Baltimore and Ohio *			5 47	5 47
Burlington and Missouri River.....		21 30		21 30
Chicago and Northwestern.....	90	940 46	1,394 14	2,333 50
Chicago, Saint Paul, Minneapolis and Manitoba.....			17 58	17 58
Chicago, Saint Paul, Minneapolis and Omaha.....	106 23	1,978 42	1 358 10	3,442 75
Cincinnati, Saint Louis and Chicago *			05	05
Chicago, Burlington and Quincy.....		287 41	144 03	431 44
Chicago and Atlantic *				
Chicago, Rock Island and Pacific.....	561 27	6,766 98	4,872 05	12,200 30
Chicago, Milwaukee and Saint Paul.....	36 00	369 93	555 06	961 59
Chicago, Saint Louis and Pittsburg*			18 61	18 61
Chicago and Alton*			7 27	7 27
Chesapeake and Ohio *		85		85
Cincinnati, New Orleans and Texas Pacific.....		22 98	5 43	28 41
East Tennessee and Virginia.....		99		99
Florida Railway and Navigation Company.....		8 40		8 40
Georgia Railroad*			6 39	6 39
Grand Rapids and Indiana.....		2 26		2 26
Hannibal and Saint Joseph.....	100 38	5 22	1 04	106 64
Illinois Central.....	6 91	1,077 07	1,339 53	2,423 51
Jacksonville, Saint Augustine and Halifax *		60		60
Kansas City, Saint Joe and Council Bluffs *			1 34	1 34
Louisville and Nashville.....	28 83	1,426 59	734 50	2,189 92
Minneapolis and Saint Louis.....		68	7 08	7 76
Missouri Pacific.....	1 94	742 00	998 16	1,742 10
Morgan's Louisiana and Texas Pacific Railroad and Steamship Company.....	3 88	40 01	4 00	47 89
New York, Lake Erie and Western *			141 73	141 73
New York Central and Hudson River*.....			14	14
Northern Pacific.....	38 08	6,060 63	3,798 02	9,896 73
Norfolk and Western *			1 15	1 15
Ohio and Mississippi *			3 45	3 45
Pennsylvania Company *			2 29	2 29
Star Union Line *			11	11
Saint Louis and Cairo Short Line *.....		76	15 86	16 62
Saint Louis and San Francisco.....		753 30	2,024 50	2,777 80
Saint John's Railway *	6 16			6 16
Southern Kansas.....			254 57	254 57
Saint Louis, Alton and Terre Haute *.....			2 80	2 80
Vicksburg and Meridian.....			36	36
Vandalia Line *			15 53	15 53
Wabash, Saint Louis and Pacific *.....		84	04	88
Total.....	12,407 77	51,534 72	48,395 54	112,338 04

*For transportation over connecting land-grant railroads.

RAILROADS INDEBTED TO THE UNITED STATES FOR RAILWAY MATERIAL PURCHASED UNDER EXECUTIVE ORDERS AT THE CLOSE OF THE WAR.

In my last annual report this matter was discussed with a view of securing some action by Congress to close the accounts of the four railroads which were delinquent in the settlement of their indebtedness.

No action has, however, been taken by Congress during the fiscal year, and the condition of the case remains practically as stated in that report.

The following is a condensed statement of the indebtedness of these four railroads on June 30, 1886, interest at 7.3 per cent. being added up to that date:

Name of company.	Value of property purchased.	Interest and charges accrued to June 30, 1886.	Total amount due with interest and charges June 30, 1886.	Total payments made to June 30, 1886.	Total amounts due June 30, 1886.
Edgefield and Kentucky.....	\$114,772 86	\$180,821 82	\$295,594 68	\$2,137 88	\$293,456 80
McMinnville and Manchester.	46,508 54	77,548 26	124,048 80	10,364 38	113,084 42
Mobile and Ohio	505,143 70	148,906 24	654,049 94	535,210 25	118,839 69
Memphis, Clarksville, and Louisville.....	336,932 36	515,185 63	852,117 99	71,030 94	781,087 05
Total.....	1,003,357 46	922,453 95	1,925,811 41	619,343 45	1,306,467 96

For a statement of the matters involved I respectfully refer to my last annual report, and repeat the recommendations made in previous annual reports that Congress be requested to take the necessary action to close these long-standing accounts.

WATER TRANSPORTATION.

During the fiscal year ending June 30, 1886, there were carried by water for the department 2,210 persons, 345 animals, and 18,864,350 pounds of material, not including 200,662 persons and 10,892,887 pounds of freight transported or ferried on United States vessels controlled or operated by the Quartermaster's Department, as shown by accompanying statement marked A.

The cost of this service by payments to commercial lines as common carriers, by payments under special and annual contracts, by payments for the charter and employment of vessels belonging to private parties, and by payments for the operation, maintenance, and repair of vessels belonging to the United States (excepting the wages of the crews, which are included with other transportation employes) aggregate the sum of \$159,369.26.

An expenditure of \$56,150 from the appropriation for the year will also be required to pay for the new steamer General McDowell, being constructed for service in San Francisco Harbor.

During the fiscal year the following-named vessels, owned by the War Department, have been in the service of the Quartermaster's Department, viz:

Steam-tug Resolute, purchased November 14, 1879, for \$17,947.46, employed in Boston Harbor, Massachusetts; during the year \$1,096.40 has been paid for repairs and \$8,429.20 for running expenses.

Steam-launch Monroe, purchased November 30, 1875, for \$15,200, in service at Fort Adams, R. I.; the sum of \$155 for repairs and \$2,379.75 for running expenses have been expended during the year.

Steam-tug Atlantic, purchased October 15, 1878, for \$13,865.56, employed at Governor's Island, New York Harbor; during the year \$2,880.31 have been paid for repairs and \$9,165.36 for running expenses.

Steam-launch Barrancas, purchased November 7, 1874, for \$5,750, in service at Fort Barrancas, Fla.; slight repairs, in amount \$58.94, were required during the year, and \$1,830 were paid for running expenses.

Propeller General Wool, purchased September 1, 1883, for \$27,870.80, employed at Fort Monroe, Va.; for repairs \$833 have been expended, and for running expenses \$4,562.72 during the year.

Steam-launch General Greene, purchased March 3, 1874, for \$5,250, employed at Governor's Island, New York Harbor; during the year the sum of \$470.34 has been paid for repairs and \$231.74 for running expenses. The crew of this launch is furnished from the steam-tug Atlantic.

Steam-launch Thayer, purchased October 8, 1874, for \$7,200; this launch has been in service the past year generally at Governor's and David's Islands, and for short periods at Forts Wadsworth and Hamilton. No repairs have been required on this launch during the year; \$2,506.15 have been paid for running expenses.

Sloop Belle of the Bay, purchased July 25, 1882, for \$275, employed at Saint Francis Barracks, Fla. No amount has been reported as expended for running expenses during the year; \$65 have been paid for repairs.

Steam-launch Hamilton, purchased February 1, 1875, for \$7,800, employed at David's Island, New York Harbor; during the year \$115.65 have been paid for repairs and \$3,903.99 for running expenses.

Steamer Chester A. Arthur, purchased June 30, 1876, for \$26,000, employed in New York Harbor. This steamer has been run (manned and victualed) under contract during the past year; the United States furnished the fuel; \$6,172.95 for repairs and \$10,619.40 for running expenses (including fuel) have been expended during the year.

Propeller Ordnance, purchased June 30, 1876, for \$18,000, employed in New York Harbor, exclusively in the ordnance service. This steamer has been run (manned and victualed) during the past year under contract; fuel furnished by the United States; the sums of \$946.88 for repairs and \$6,714.10 for running expenses have been expended during the year.

Propeller General McPherson, purchased September 1, 1867, for \$40,000, employed in San Francisco Harbor, California; during the year \$1,497.82 have been expended for repairs and \$18,365.93 for running expenses.

The honorable the Secretary of War has decided that upon completion and acceptance by the United States of the new steamer now in course of construction for service in San Francisco Harbor, the General McPherson shall be sold at public auction.

Steam-launch Amelia Wheaton, purchased August 24, 1880, for \$8,000, employed at Fort Cœur d'Alène, Idaho. Comparatively little service was rendered by this launch during the year, no expenditure for repairs being reported, and but \$165 paid for running expenses.

Steam-launch Dispatch, purchased November 28, 1879, for \$3,510, employed at Vancouver Depot, Wash. Ter.; during the year \$553.83 for repairs and \$1,459.80 for running expenses have been expended.

Steam-launch Lillie Lee, purchased July 23, 1879, for \$6,075, employed at Devil's Lake, Dakota; very little service rendered during the year, \$21.70 for repairs, and \$5.68 for running expenses only being reported.

The United States schooner Matchless, transferred to the United States Coast and Geodetic Survey, upon conditions stated in my last annual report, has remained in that service during the past fiscal year,

no emergency having arisen rendering her retransfer to the Quartermaster's Department necessary or desirable.

A statement showing the vessels owned or purchased by the Government, and employed in the Quartermaster's Department during the year, is herewith marked C.

The total cost of repairing, running, and maintaining these vessels, including the wages of the crews, during the fiscal year, as reported to this office, was \$85,206.64.

The reports received from officers of the Quartermaster's Department show that there have been nineteen vessels of different kinds employed at various times during the year, at an expense of \$29,502.05, a statement of which accompanies this report marked D.

Under the authority given by the honorable the Secretary of War, on the 10th of March, 1886, a contract was entered into by the chief quartermaster, Division of the Pacific, at San Francisco, Cal., with the Union Iron Works of that city, for the construction of a steam propeller, with hull of steel, for service in the harbor of San Francisco, in transporting officers and men and military supplies. Her cost is not to exceed \$56,150.

At the close of the fiscal year satisfactory progress had been made in the construction of this vessel, and by the terms of the contract it will be completed and delivered to the Quartermaster's Department on or before October 11, 1886.

The following is an abstract of payments during the year on account of water transportation out of the appropriation "Transportation of the Army" upon accounts settled by disbursing quartermasters stationed throughout the country and through the Quartermaster-General's Office and the accounting officers of the Treasury :

Contractors, steamers, or individuals.	Paid for services during year ending—		Total.
	June 30, 1885.	June 30, 1886.	
Alabama River Association.....	\$1 80	\$46 23	\$48 03
Alaska Commercial Company.....		220 50	220 50
Algolah, steamer.....	27 60	60 25	87 85
Baltimore Steam Packet Company.....	251 30	553 63	804 93
Bassett, James W.....		361 25	361 25
Beda, steamer.....	166 83	250 45	417 28
Blanchard, Dean.....		29 71	29 71
Boston and Savannah Steamship Company.....		126 48	126 48
Boyd, Alfred.....		55 00	55 00
Boyer's Sons, L.....		799 00	799 00
Breon, Paul.....		344 58	344 58
Central Vermont Railroad and Steamboat Company.....	4 48	30 21	34 69
Chapman, U. E.....		1,690 00	1,690 00
Citizens' Steamboat Company.....	57 92	4 59	62 51
Cluff, H. and John.....		48 16	48 16
Clyde Line Steamship Company.....		45 39	45 39
Colorado Steam Navigation Company.....	220 58	1,076 71	1,297 29
Cornell Steamboat Company.....		29 25	29 25
Cromwell Line.....		35 00	35 00
Detroit and Cleveland Steam Navigation Company.....	31 33	43 67	75 00
Drown, C. W.....		115 87	115 87
Eastern Towing Company.....		116 47	116 47
Emille Martin, schooner.....		91 19	91 19
Enos, Frank.....		50 00	50 00
Evans, Ball & Co.....		99 50	99 50
Fogarty & Johnson.....		415 00	415 00
Garfield, schooner James A.....		109 28	109 28
Grounds, B.....	117 25	378 19	496 14
Guiding Star, steamer.....		52 34	52 34
Hartford and New York Transportation Company.....		51 01	51 01
Hearman, E. E.....		58 00	58 00
Horner, E. F.....		25 00	25 00
Humboldt, steamer.....	25 64	1,168 59	1,184 12

Contractors, steamers, or individuals.	Paid for services during year ending—		Total
	June 30, 1885.	June 30, 1886.	
Humboldt Transportation Company.....		\$217 00	\$217 00
Ityaca Transfer Company		25 35	25 35
Inland and Seaboard Coasting Company.....	\$102 58	192 46	295 04
Kankus, A. (an Indian).....	200 00		200 00
Kelly, William.....	446 15	3,416 88	3,863 03
Kennebec Steamboat Company	7 57	67 16	74 73
Lake Michigan and Lake Superior Transportation Company....	66	140 29	140 95
Lake Superior Transit.....	28 00	167 08	195 08
Lennox & Harrold		40 00	40 00
Loomis, L. A.....	782 00	8,541 20	9,323 20
McKenzie, John K.....		252 40	252 40
Maine Steamship Company	41 00	29 47	70 47
Mallory, C. H., & Co.....	2,045 84	1,163 44	3,209 28
Mary Wittich, steamer.....		30 00	30 00
McCabe, Thomas L.....	23 00	199 00	222 00
Merchants' and Miners' Transportation Company	8 54	136 63	145 17
Metropolitan Steamship Company	16 26	63 72	79 98
Morgan's Louisiana and Texas Railroad and Steamship Company	166 20	9,165 75	9,331 95
Morgan, James.....		94 25	94 25
Moulton, Alfred.....	2 00	174 90	176 90
Mullen, F.....		113 80	113 80
Murray & Birge		178 64	178 64
Murray's Line		239 50	239 50
New Haven Steamboat Company	9 77	62 66	72 43
New York and Baltimore Transportation Line	38 32	35 07	73 39
New York and Charleston Steamship Company.....	177 67	254 07	431 74
New York, Charleston, & Athens Steamboat Company.....		154 37	154 37
Norwich and New York Transportation Company	74 25	151 49	225 74
Ocean Steamship Company, of Savannah, Ga.....	277 23	108 44	385 67
Old Colony Steamboat Company.....	62 37	684 36	746 73
Old Dominion Steamship Company	155 21	293 64	448 85
Oregon Improvement Company	220 50		220 50
Oregon Railway and Navigation Company	1,600 32	9,443 13	11,103 45
Overton & Hawkins.....		539 50	539 50
Pacific Coast Steamship Company.....	476 52	913 87	1,390 39
Peoples' Line of Steamers.....	5 42	28 23	33 65
Philadelphia, Albany and Troy Steamboat Company.....		195 88	195 88
Portland Steam Packet Company	27 70	51 24	78 94
Potomac Steamboat Company.....	112 92	279 88	392 80
Powers, T. C.....	3,164 08	26,744 40	29,908 48
Providence and Stonington Steamship Company		25 00	25 00
Quill, James F.....		568 19	568 19
Richmond and York River	1 04	169 78	170 82
Rohnick, John.....	50 00	225 00	275 00
Ruth, steamer.....	33 76		33 76
Saint Louis and New Orleans Anchor Line	46 77	634 86	681 63
Saint Louis and Saint Paul Packet Company	165 90	2,090 12	2,256 02
Shea, Daniel.....	2,261 73	278 91	2,540 64
Speedwell, schooner.....		82 59	82 59
Stella, steamer.....		33 00	33 00
Theresa, schooner.....		469 49	469 49
Traveller, steamer.....	219 34	284 98	504 32
Tremper, J. H.....		33 00	33 00
United States Mail Line.....		28 00	28 00
Van Brunt, James A.....		77 40	77 40
Vancouver Transportation Company	274 35	2,113 11	2,387 46
Warford, Robinson & Hinman	50 00		50 00
Walsh Jack (an Indian).....	25 00		25 00
Wittich, W. L.....	200 00		200 00
Woods, J. B.....		90 02	90 02
Various individuals to whom payments of less than \$25 have been made	34 80	718 76	753 56
Total.....	14,600 10	81,086 36	95,686 46

WAGON TRANSPORTATION.

One hundred and forty-seven million three hundred and sixty-four thousand seven hundred and thirty-six pounds of military property were transported by wagon during the fiscal year, at a cost to the appropriation "Transportation of the Army" of \$496,930.47.

The sum of \$49,528.79 was still due on outstanding accounts June 30, 1886.

Eighty-one contracts for wagon transportation, made by officers of the Quartermaster's Department throughout the country, were received at this office during the year, an abstract of which, showing names of contractors, routes of supply, date of each contract and date of its expiration, and rates payable, accompanies this report, marked E.

The following is an abstract of payments during the year on account of wagon transportation out of the appropriation "Transportation of the Army," upon accounts settled by disbursing quartermasters stationed throughout the country and through the Quartermaster-General's Office and the accounting officers of the Treasury.

Contractors, transportation lines, and individuals.	Paid for services during the year ending June 30—			Total.
	1884.	1885.	1886.	
Ahern, Thomas.....		\$56 57		\$56 57
Armstrong Bros.....			\$75 00	75 00
Bair, Thomas.....		341 18	7,020 18	7,361 36
Baker & Johnson.....	\$1,359 91			1,359 91
Baldwin, Levi.....			1,638 00	1,638 00
Barton, S. W.....			600 00	600 00
Bassett, Jas. W.....			3,898 10	3,898 10
Bear, S. W.....			606 26	606 26
Bender, Jos. A.....			49 26	49 26
Bentley, W. H.....		34 30		34 30
Berry, George.....			1,636 60	1,636 60
Bickford, C. B.....			5,004 96	5,004 96
Boetcher, Richard.....			75 00	75 00
Bollman, Jos.....			345 00	345 00
Bottsford, W. H.....		56 00		56 00
Boyle, D. G.....		36 00		36 00
Bradbury, A. E.....		882 21	4,291 24	5,173 45
Browne, David G.....		293 15	12,919 69	13,212 84
Burford, Singleton.....			5,643 75	5,643 75
Burns, John L.....			3,156 03	3,156 03
Carlson, Andrew.....			200 00	200 00
Carpenter, W. P.....			111 00	111 00
Carr, James.....			11,370 00	11,370 00
Carroll, John.....			345 60	345 60
Carruthers, Robert.....			45 00	45 00
Carr, Robert.....			554 80	554 80
Clark, H. S.....		197 75		197 75
Clay, C. E.....		7,656 83		7,656 83
Collard, George.....			49 26	49 26
Connolly, John.....			158 19	158 19
Conry, Thomas J.....			687 30	687 30
Cope, Frederick.....			296 06	296 06
Cotton, C. H.....		4,802 42		4,802 42
Cottrel, E. B.....		108 00		108 00
Crawford, William J.....			1,645 54	1,645 54
Crilly, William H.....			124 85	124 85
Cunningham, Parlan W.....			2,312 00	2,312 00
Dall & Weems.....			749 23	749 23
Davis & Warren.....		56 43		56 43
Davis, Thomas.....			192 00	192 00
De la Ossa, David.....			26 00	26 00
Delbanco, Nathan.....		563 48		563 48
Dentz, Max.....			601 60	601 60
Derry, C. S., & Co.....			474 55	474 55
De Witt, A.....			25,518 01	25,518 01
Dillon, F. W.....			28 00	28 00
Domingo, Jonore.....			128 00	128 00
Doughty, L. R.....			32 00	32 00
Doyle, Martin.....			796 00	796 00
Draper, G. A.....		2,176 81	12,360 01	14,536 82
Driscoll, John.....			175 24	175 24
Earl, D. W.....		2,875 26		2,875 26
Edminster, W. S.....			658 07	658 07
Ely, Edgar A.....			164 46	164 46
Evans, Frederick T.....		6,109 30		6,109 30
Fairfield, Samuel.....			6,286 44	6,286 44
Farris, M. R.....		275 90		275 90
Ferree, D. J.....		828 85		828 85
Florine, O. N.....			203 00	203 00
Friend, Lewis.....			120 00	120 00
Gallagher, M.....			150 00	150 00
Gillihan, R. H.....			379 22	379 22

Contractors, transportation lines, and individuals.	Paid for services during the year ending June 30—			Total.
	1884.	1885.	1886.	
Gleim, E. F.		\$765 23		\$765 23
Gorham, W. N.			\$668 86	668 86
Graham & Buford		1,081 60		1,081 60
Grant, James H.			323 00	323 00
Grant, L. J., & Co.			10,047 73	10,047 73
Guernsey, J. L.		151 41		151 41
Guerra, Manuel.			370 67	370 67
Gurnee, A.			308 70	308 70
Hanna, Adam.			2,479 88	2,479 88
Hanna & Murray			2,332 90	2,332 90
Hanson, Israel J.			2,115 03	2,115 03
Harrell, C. J.			152 12	152 12
Hart, John		225 80		225 80
Higbee, Morris			75 00	75 00
House, Otis			128 00	128 00
Howard, A. B.			1,082 34	1,082 34
Howard, M. W.		4 40	29 95	34 35
Hutchinson, J. H.			80 00	80 00
Hutson, N.			2,511 94	2,511 94
Jewett, G. H.		299 91		299 91
Johnson, Charles J.		30 50	157 69	188 19
Johnson, Peter			626 66	626 66
Johnson, T.		8,003 07		8,003 07
Jordan, W. B.		27 70	21,000 18	21,027 88
Kelly, William		364 53		364 53
Kennene, Michael			317 58	317 58
Kerr Bros.			70 75	70 75
Kervin, James			2,704 18	2,704 18
Knapp, Eugene			288 00	288 00
Lane, M. J.			61 50	61 50
Lee, W. M. D.		3,083 07	80,168 19	83,251 26
Lemp & Lamb		128 39		128 39
Leyser, Simon			8,578 39	8,578 39
Libby, T., & Co.		74 93		74 93
Lick, S.			2,250 00	2,250 00
Lipset, J. L.			88 28	88 28
Lockhart, Hopper Bros. & Co.			508 00	508 00
Mack, John		8 20	129 88	138 08
Mager & Young		4,188 37		4,188 37
Maginn, B. W.		2 00	20,769 33	20,771 33
Martih, A. D.			4,015 05	4,015 05
Martinez, José Maria			160 00	160 00
Mascarinus, José			840 53	840 53
McCormick, Paul			5,418 28	5,418 28
McGinniss, James			30 00	30 00
Meaney, M. C.			1,040 55	1,040 55
Melville, G. W.			3,909 02	3,909 02
Miller, Charles W.			330 86	330 86
Mitchell, G. M.			420 62	420 62
Mitchell, William			2,843 67	2,843 67
Montano, Pedro		418 94		418 94
Morgan & Hastings			92 40	92 40
Morton, W. R.		69 77		69 77
Mullen, P.		198 45	962 65	1,161 10
Murphy, D., & Son				61 05
Nash, H. T.	\$61 05		213 50	213 50
Nauwald, Charles			5,472 40	5,472 40
Noerper, Chr			837 13	837 13
Norton, A. H.			96 00	96 00
Norton & Stewart		955 97	1,236 62	2,192 59
Nourse, Frank A.			747 92	747 92
Oliver, Alexander G.			20,405 55	20,405 55
Oregon Transfer Company		299 18	1,739 72	2,038 85
Orr, J. W.			9,529 54	9,529 54
Palmer, Frank			4,405 56	4,405 56
Palmer, L. C.		1,080 71		1,080 71
Parish, Edwin			186 60	186 60
Paulo, Daniel, sr			4,776 12	4,776 12
Percival, William			143 63	143 63
Poe, J. J.			126 00	126 00
Power, John W.		2,505 19	20,027 84	22,532 53
Pratt, Daniel S., jr			430 89	430 89
Randolph, J. N.			42 00	42 00
Rathbun, E. F.			63 00	63 00
Reames, Evans E.			4,410 28	4,410 28
Riggs, W. C.		2,082 52		2,082 52
Rivers, J. D.		140 95		140 95
Roderick & Crilly		412 38		412 38
Romiller, A. E.		1,413 35	45 00	1,458 35
Russell, R.			180 00	180 00

Contractors, transportation lines, and individuals.	Paid for services during the year ending June 30—			Total.
	1884.	1885.	1886.	
Samaniego, M. G.			\$808 18	\$808 18
Schmidt, F.			1,552 48	1,552 48
Seager, John			701 99	701 99
Seiberger, F. D.			644 00	644 00
Shryock, George.			80 00	80 00
Smythe, Thomas S.			66 20	66 20
Snow, H. M.		\$163 20	186 40	349 60
Solomon, Adolph		6,495 03	19,219 21	25,714 24
Solomon, Wickersham & Co.		9 00	21 15	30 15
Stitt, J. W.			55 00	55 00
Thatcher, Cornell & Co.			1,104 79	1,104 79
Towar, Fletcher M.			984 30	984 30
Troboese & Santleben.			2,155 56	2,155 56
Tutein, E. G.			643 50	643 50
Vaile & Miner.			80 12	80 12
Varnum, J. G.			78 00	78 00
Wahler, John.			2,301 75	2,301 75
Walker, Ed.			6,206 92	6,206 92
Walker, J., & Co.			49 00	49 00
Walters, C. H.		102 21		102 21
Waters, Moses.			1,340 87	1,340 87
Watson, Thomas C.		106 25	529 13	635 38
Webber, Chr.			1,459 23	1,459 23
Webster, William E.			7,404 10	7,404 10
Wells, Fargo & Co.'s Express.		9 25	109 80	209 05
West Point Foundry Association.		224 54		224 54
White, Alexander.			50 00	50 00
Wickersham, D. W.			25,426 15	25,426 15
Williams, George.			25 00	25 00
Winterbottom & Winters.		604 10	6,851 60	7,455 70
Wolf, G.		178 74		178 74
Wood, David.			391 51	391 51
Various individuals to whom payments of less than \$25 have been made.		94 33	057 26	751 59
Total.	\$1,420 96	63,353 56	447,401 68	512,176 20

STAGE TRANSPORTATION.

By stage 4,391 persons and 9,180 pounds of stores and extra baggage were transported under direction of the Quartermaster's Department during the year, at a cost of \$51,461.24; of this sum, \$6,722.81 was due on outstanding accounts June 30, 1886.

The following is an abstract of payments made during the year for stage transportation, out of the appropriation "Transportation of the Army," upon accounts settled by disbursing quartermasters stationed throughout the country and the Quartermaster-General's Office and the accounting officers of the Treasury:

Company or individual.	Paid for services during the year ending—		Total.
	June 30, 1885.	June 30, 1886.	
Adelle, A.		\$60 00	\$60 00
Agno, A. B.		30 00	30 00
Arizona Stage.	\$375 00	2,321 49	2,696 49
Armstrong Bros.		834 20	834 20
Ashland and Linkville Stage.		48 00	43 00
Bair, Thomas.		1,700 00	1,700 00
Barnett, J. R.	50 00	579 25	629 25
Benjamin, L. P.		54 00	54 00
Bidwell Stage Line.		106 50	106 50
Bismarck and Pierre Stage.	7 00	216 00	223 00
Bismarck and Fort Yates Stage.	7 00	50 22	57 22
Bragan & Co.	18 00	26 00	44 00
Broadwater, McCulloh & Co.	116 00	1,359 12	1,475 12

Company or individual.	Paid for services during the year ending—		Total.
	June 30, 1885.	June 30, 1886.	
Bryns & Vantyl.....	\$167 30		\$167 30
California and Oregon Stage.....		\$124 00	124 00
California, Oregon and Idaho Stage.....	24 00	551 60	575 60
Catlin, B. S.....	14 00	97 75	111 75
Chain, B. E.....		51 00	51 00
Cheyenne and Black Hills Stage.....	83 50	2,213 15	2,296 65
Colorado and Wyoming Stage.....	217 00		217 00
Crilly & Cranston.....		55 00	55 00
Crilly, W. H.....		1,330 95	1,330 95
Culverhouse, Jerry.....		66 00	66 00
Deffenbach, E.....		25 00	25 00
Duffy, E.....		53 00	53 00
Duncan, B. L.....		147 60	147 60
Dunn, George.....		315 50	315 50
Dunn, John.....		40 00	40 00
Faris, A. J.....		116 00	116 00
Farmer, James.....		89 25	89 25
Fort Buford and Glendive Stage.....	64 40		64 40
Frazer, G. M.....	16 00	48 00	64 00
Freer, David.....	34 25		34 25
Great Western Stage, Mail and Express.....		863 50	863 50
Greminger, J. C.....		95 20	95 20
Harrigan, John.....		142 00	142 00
Helena and Benton Stage.....	27 50	2,735 00	2,762 50
Hollowell, J. O.....		127 50	127 50
King, G. H.....		50 00	50 00
Knowlton, J., jr.....		60 00	60 00
Landerbaugh, A. R.....		80 00	80 00
Linkville and Fort Klamath Stage.....		176 00	176 00
Maxwell, A. J.....	25 00		25 00
McCone & Williamson.....	84 40	505 00	589 40
Merritt, Stephen.....		5,250 00	5,250 00
Metcalfe, R. D.....		71 50	71 50
Miller & Pomeroy.....		25 00	25 00
Moore, Charles S.....	16 00	128 00	144 00
Moore, D. Z.....		250 60	250 60
Nix, James I.....	10 00	469 40	479 40
Northwestern Stage and Express.....	921 00	1,075 00	1,996 00
Norton & Stewart.....	57 70	1,621 26	1,678 96
Pacific Coast Stage.....	5 00	20 00	25 00
Palmer, Frank.....		32 20	32 20
Paul, William.....		40 00	40 00
Peaslee, W. C.....		96 50	96 50
Pomeroy Bros.....		101 25	101 25
Power, T. C., & Bro.....		324 80	324 80
Rathdrum Stage.....		85 50	85 50
Rathmell, H. W.....	6 00	38 00	44 00
Reno and Bidwell Stage.....	26 00	1,385 40	1,411 40
Reno, Cedarville and Bidwell Stage.....		51 00	51 00
Reynolds, P. G.....	356 60	1,255 85	1,612 45
Rice & Musser.....		587 30	587 30
Sears, H. A.....		146 00	146 00
Smith, Jerome.....	11 00	35 50	46 50
Solomon, J. E.....		35 00	35 00
Soule & Co.....		47 50	47 50
Southwestern Stage.....		966 85	966 85
Sowell, R. S.....		69 00	69 00
Spokane Falls and Cœur d'Alène Stage.....		47 50	47 50
Springfield Stage.....	55 00	40 00	95 00
Stanton, M.....		323 46	323 46
Utah, Idaho and Oregon Stage.....	442 50		442 50
Vaile & Miner.....	359 50	1,199 80	1,559 30
Van Eaton, C. W.....		299 00	299 00
Webb, H. L.....	12 00	391 00	403 00
Williamson, L. P.....	552 80	1,160 50	1,713 30
Winders, Claron A.....		80 00	80 00
Wise, Alexander.....		48 00	48 00
Wood, O. P.....		40 00	40 00
Wyoming Stage.....	1,765 00	6,884 05	8,649 05
Young, F. H.....		86 00	86 00
Young, J. H., & Co.....	45 50	556 50	602 00
Zent, William.....	15 00	12 00	27 00
Zuck, F. M.....	37 50	876 45	913 95
Various individuals to whom payments of less than \$25 have been made.....	125 12	952 98	1,078 10
Total.....	6,149 57	44,738 43	50,888 00

APPROPRIATIONS FOR ARMY TRANSPORTATION AND THEIR DISBURSEMENT.

By act of March 3, 1885 (24 Stat. L., 359) the sum of \$2,900,000 was appropriated for Army transportation for the fiscal year ending June 30, 1886.

A compilation has been made from disbursing officers' accounts and Treasury settlements exhibiting the amounts expended during the year and the amounts of outstanding accounts due and payable at the close of the year, arranged in items, as follows:

Nature of accounts.	Amount of payments during the year.	Amount of outstanding accounts July 1, 1886, due and payable.	Total cost of transportation service during the year ending June 30, 1886.
Rail:			
Passenger.....	\$212,412 64	\$77,037 55	\$289,450 19
Freight.....	456,556 20	194,488 01	651,044 21
Water:			
Passenger.....	9,728 85	820 94	10,549 79
Freight.....	71,357 51	8,666 17	80,017 68
Wagon, freight.....	447,401 68	49,528 79	496,930 47
Stage and hack:			
Passenger.....	44,259 89	6,507 01	50,766 90
Extra baggage.....	478 54	215 80	694 34
Employes:			
Civilian.....	707,032 35	23,702 20	730,734 55
Extra duty.....	80,571 53	1,662 05	82,233 58
Vessels:			
Purchasing, operating, and maintaining.....	48,939 29	46,591 00	95,530 29
Chartering.....	17,089 31	.....	17,089 31
Repairing.....	9,752 28	2,579 71	12,331 99
Means of transportation:			
Purchasing.....	37,422 14	11,444 11	48,866 25
Repairing and purchasing material for repairing.....	52,772 27	1,014 86	53,787 13
Draft animals and harness:			
Horses.....	4,494 95	11 00	4,505 95
Mules.....	87,512 60	93 50	87,606 10
Stabling, watering, and attendance upon public animals.....	19,790 27	1,844 39	21,634 66
Purchasing and manufacturing harness.....	50,202 50	1,459 19	51,661 69
Repairing harness.....	1,832 19	5 00	1,837 19
Water supply and sewerage:			
Digging wells.....	4,164 00	.....	4,164 00
Water rent and taxes.....	35,837 07	1,964 76	37,801 83
Material purchased.....	88,776 55	3,392 56	92,169 11
Constructing and repairing.....	50,527 07	11,818 20	62,345 27
Wharves and bridges:			
Constructing.....	1,451 51	3,390 00	4,841 51
Repairing.....	12,991 77	.....	12,991 77
Renting of wharves and wharfage.....	11,834 61	88 72	11,923 33
Roads, harbors, and rivers:			
Constructing roads.....	12,366 07	.....	12,366 07
Repairs and removal of obstructions.....	3,681 96	1,553 41	5,235 37
Tolls on turnpikes, ferries, and bridges.....	5,908 43	281 36	6,189 79
Advertisements, publications, and printing.....	4,934 04	881 20	5,815 24
Expenses not enumerated above, such as lumber, packing boxes, tags, reimbursements, miscellaneous articles, &c.	29,662 35	7,801 31	37,463 66
Total.....	2,621,742 42	458,836 74	3,080,579 16

The foregoing statement indicates that the aggregate cost of the transportation service during the fiscal year was \$3,080,579.16, and that a deficiency approximating \$181,000 exists, to be provided for by Congress to pay legitimate outstanding accounts.

The department has been constrained during the year to make unusual and extraordinary expenditures from the appropriation, among which the following are mentioned: The construction of a steam propeller for service in San Francisco Harbor, costing \$56,150, to take the place of the worn-out steamer General McPherson, which has been in the service

for twenty years; the increased transportation expenses in the Department of Arizona and the District of New Mexico, owing to the Indian troubles in that section, an excess of \$118,285.60 over the preceding fiscal year; the large purchases of draft animals, with the cost of transportation to the field of action, increased by the Indian troubles, and the replacement of stock worn out in the Oklahoma troubles, and other movements on the border during the preceding fiscal year, necessitating an expenditure of \$92,112.05, being \$48,273.30 in excess of the preceding year.

The strictest economy in transportation expenditures has been enjoined upon and required of all officers of the department during the year to the extent of denying many seeming necessities of the service, and deferring desirable movements of troops. But notwithstanding these efforts to reduce expenses, and keep within the limits of the appropriation, an apparent deficiency of about \$181,000 exists as above stated.

Inclosed is a statement, marked F, showing in detail the transportation service of the Army during the fiscal year ending June 30, 1886, under the various items of expenses, prepared from Treasury settlements and from reports of disbursing officers in each military department, at each depot of the Quartermaster's Department, and each military post, armory, and arsenal, together with a statement of the number of persons and pounds of freight transported under direction of the Quartermaster's Department during the same period.

In addition to the payments above reported (\$2,621,742.42), the sum of \$664,461.54 was expended during the year to pay outstanding accounts for transportation services and supplies incurred during previous fiscal years.

The expenditures on account of previous fiscal years which have been paid out of the available appropriations for those years have been itemized as follows:

Nature of accounts.	Paid from appropriations, fiscal year ending—		Total.
	June 30, 1884.	June 30, 1885.	
Rail:			
Passenger.....	\$85,059 61	\$67,401 48	\$152,461 09
Freight.....	25,459 59	137,977 00	163,436 59
Water:			
Passenger.....		992 42	992 42
Freight.....	16 25	13,606 68	13,622 93
Wagon, freight.....	1,420 96	63 353 56	64,774 52
Stage and hack:			
Passenger.....	7 75	6,149 57	6,157 32
Extra baggage.....			
Employees:			
Civilian.....		18,287 53	18,287 53
Extra duty.....		2,402 33	2,402 33
Vessels:			
Purchasing, operating, and maintaining.....		5,561 08	5,561 08
Chartering.....		250 08	250 08
Repairing.....		1,032 30	1,032 30
Means of transportation:			
Purchasing.....		60,878 45	60,878 45
Repairing and purchasing material for repairing.....		1,500 05	1,500 05
Draft animals and harness:			
Horses.....		1,997 50	1,997 50
Mules.....		21,461 00	21,461 00
Stabling, watering, and attendance upon public animals.....		4,787 74	4,787 74
Purchasing and manufacturing harness.....		26,189 06	26,189 06
Repairing harness.....		95 50	95 50

Nature of accounts.	Paid from appropriations, fiscal year ending—		Total.
	June 30, 1884.	June 30, 1885.	
Water supply and sewerage :			
Digging wells.....			
Water rents and taxes.....		\$2, 168 47	\$2, 168 47
Material purchased.....		48, 967 25	48, 967 25
Constructing and repairing.....		36, 690 78	36, 690 78
Wharves and bridges :			
Constructing.....		7, 312 20	7, 312 20
Repairing.....		1, 870 84	1, 870 84
Rent of wharves and wharfage.....		449 38	449 38
Roads, harbors, and rivers :			
Constructing roads.....		4, 168 35	4, 168 35
Repairs and removal of obstructions.....		782 50	782 50
Tolls on turnpikes, ferries, and bridges.....	\$0 25	1, 512 67	1, 521 92
Advertisements, publications, and printing.....		1, 979 05	1, 979 05
Expenses not enumerated above, such as for reimbursements, traveling expenses, lumber, packing-boxes, canvas, rope, hire of horses, &c.....	2, 539 09	10, 070 22	12, 663 31
Totals.....	114, 566 50	549, 895 04	664, 461 54

By act of March 3, 1885 (24 Stat., 360), the sum of \$125,000 was appropriated for payments for Army transportation over certain land-grant railroads during the fiscal year. Of this appropriation the sum of \$48,395.54 was paid out on settlements of the accounting officers of the Treasury during the year, leaving a balance of \$76,604.46 on hand to pay outstanding claims. The additional sum of \$63,942.50 was also paid from similar appropriations of previous fiscal years, making a total of \$112,338.04 paid for such service during the fiscal year.

TRANSPORTATION PROVIDED BY THE QUARTERMASTER'S DEPARTMENT FOR OTHER DEPARTMENTS OF THE GOVERNMENT.

The Quartermaster's Department has continued during the fiscal year to receive public property from other Departments of the Government and provide transportation therefor as required. This duty has been performed under the act of Congress of July 5, 1884 (23 U. S. Stat., 111), which provides as follows :

That hereafter the Quartermaster-General and his officers, under his directions, wherever stationed, shall receive, transport, and be responsible for all property turned over to them, or any one of them, by the officers or agents of any Government survey, for the National Museum, or for the civil or naval Departments of the Government in Washington or elsewhere, under the regulations governing the transportation of Army supplies, the amount paid for such transportation to be refunded or paid by the Bureau to which such property or stores pertain.

The following is a list of the Divisions and Bureaus of Departments which regularly call upon the Quartermaster's Department for the transportation of freight under the law quoted :

Of the Treasury Department.—Customs, Mint, Internal Revenue, Light-House, Life-Saving, Revenue Marine, Marine Hospital, Independent Treasury, Steamboat Inspection, Coast and Geodetic Survey.

Of the Navy.—Yards and Docks, Navigation, Ordnance, Provisions and Clothing, Medicine and Surgery, Equipment and Recruiting, Naval Observatory, Marine Corps.

Of the Interior Department.—General Land Office, Indian Bureau, Geological Survey.

The system of transportation of the Quartermaster's Department, by which all deductions and withholdments of money on account of Government lands and bonds granted railroads are made in the settlement of transportation accounts as required by law, has resulted in a large saving to the appropriations of other Departments which have no such system, and as the service has been satisfactorily performed, it follows that the law quoted has in its operation been of benefit to the United States.

TRANSPORTATION ACCOUNTS AND CLAIMS.

Three thousand one hundred and eighty transportation accounts and claims, amounting to \$1,163,786.27, were adjusted in the transportation branch during the year. Of these 3,148, amounting to \$1,154,173.72, were referred to the proper Bureau or office for settlement; 16, amounting to \$3,203.26, were unfavorably reported upon and rejection recommended, and 16, amounting to \$6,409.29, were suspended for additional evidence.

Fifty-two, amounting to \$7,167.72, were, at the close of the fiscal year, awaiting action or under adjustment.

The various classes of accounts and claims acted upon by the transportation branch of this office comprise land-grant railroad accounts, bonded Pacific Railroad accounts; miscellaneous railroad, water, wagon, and stage accounts; claims growing out of the charter and seizure of vessels by the Quartermaster's Department, and out of the use of railroads during the war; for services of employes on vessels and military railroads, and for use and hire of wagons and teams in all cases where the settlement or payment of such accounts and claims requires the action of the accounting officers of the Treasury; also where instructions are required by disbursing quartermasters upon transportation accounts and claims in cases where the laws and regulations are not clear or understood; also the freight accounts of the several Bureaus of the Treasury, the Navy, and the Interior Departments, in cases where the transportation was furnished under direction of the Quartermaster's Department.

REGULAR AND MISCELLANEOUS SUPPLIES.

ANIMALS.

The following statement shows the number of cavalry and artillery horses purchased during the fiscal year, their aggregate cost and average cost:

Cavalry and artillery horses purchased.

For what military division.	Number.	Total cost.	Average cost.
Division of the Atlantic.....	31	\$5,214 50	\$168 21
Division of the Missouri.....	699	100,800 90	144 22
Division of the Pacific.....	483	64,785 25	134 09
West Point, N. Y.....	17	2,695 00	158 53
Jefferson Barracks, Mo.....	21	3,192 00	152 00
Total.....	1,251	176,667 65	141 24

The cavalry and artillery horses for the various divisions were purchased under authority of the Secretary of War, and were inspected by his direction, as required by law.

The following statement shows the number of draft and pack animals purchased during the fiscal year, their distribution, aggregate cost, and average cost:

Mules and team horses purchased.

For what department, depot, or post.	Horses.			Mules.		
	Number.	Total cost.	Average cost.	Number.	Total cost.	Average cost.
Division of the Atlantic	8	\$1,734 50	\$216 81	7	\$1,309 00	\$187 00
Department of California				4	500 00	125 00
Department of Dakota	5	780 80	156 16			
Department of Arizona				209	31,862 75	152 44
Department of the Platte				120	17,892 00	152 43
Department of the Missouri				208	32,806 80	157 72
Washington depot, D. C.	4	1,000 00	250 00			
West Point, N. Y.				10	1,950 00	195 00
Saint Louis depot				5	928 80	185 76
Philadelphia depot	1	190 00	190 00			
Total	18	3,705 30	205 85	563	87,259 35	154 99

The following is a summary of the number of animals purchased, sold, died, &c., during the fiscal year, and remaining on hand at its close, as indicated by reports received at this office:

	Cavalry and artillery horses.	Team horses.	Mules.	Oxen.
On hand July 1, 1885	8,353	470	5,554	6
Purchased	1,251	18	563	
Taken up, &c.	12	2	5	
Total to be accounted for	9,616	490	6,122	6
Sold	780	28	329	
Died	212	8	259	
Lost and stolen	15		41	
Total sold, died, &c.	1,007	36	629	
On hand June 30, 1886	8,609	454	5,493	6

The following is a tabular statement of the sales of public animals in the different departments and at general and other depots during the fiscal year, as reported to this office, showing the number of each class sold and the total amount realized:

Where sold.	Cavalry and artillery horses.		Draft horses.		Mules.	
	No.	Amount.	No.	Amount.	No.	Amount.
Division of the Atlantic	12	\$656 00	2	\$87 50	7	\$341 00
Department of Dakota	134	8,064 72	1	93 00	23	1,140 00
Department of the Missouri	142	6,761 25			103	5,147 25
Department of the Platte	56	2,728 00			5	249 00
Department of Texas	100	3,448 75			45	969 76
Department of California	19	505 00	1	23 00	5	221 50
Department of Columbia	53	1,790 00	9	215 00	17	371 50
Department of Arizona	227	10,056 95			100	3,675 64
New York depot	6	688 00	3	253 00		
Saint Louis depot					1	11 00
Washington depot			8	677 00	4	335 00
San Francisco depot			4	276 00	18	1,138 00
David's Island, New York Harbor	11	663 00			1	15 00
West Point, N. Y.	3	144 50				
Jefferson Barracks, Mo.	17	223 50				
Total	780	35,727 67	28	1,624 50	329	13,654 65

WAGONS AND AMBULANCES.

During the year there were purchased one hundred six mule Army wagons, at a cost of \$7,500, and nine bodies for two or four horse or mule wagons, at a cost of \$168.75.

HARNESS.

Under authority of the Secretary of War, harness was manufactured at the Fort Leavenworth Military Prison for the Quartermaster's Department during the year, as follows, viz:

60 single sets ambulance harness, lead	\$901 35
84 single sets ambulance harness, wheel	1,505 84
3 express wagon harness, complete	51 25
210 cart harness, complete	2,105 20
2,454 halters and straps	3,245 41
109 halters	91 56
200 halter straps	66 67
38 riding bridles	20 90
8 riding saddles	48 80
132 lines, double, wheel	174 24
40 lines, double, lead	112 60
4 lines, cart	3 72
12 lines, lead	23 28
1 line, check	64
100 lines, side	81 00
12 surcingles	17 48
4 straps, neck	2 04
4 straps, bridle	1 24
52 straps, breast	20 97
72 straps, hame	4 32
200 pack saddles and equipments, complete	5,112 00
100 aparejos and equipments, complete	5,310 00
3,000 supporting sticks for aparejos	26 50
Or a total cost, as reported, of	18,927 01

MESS TABLES AND BENCHES.

There were manufactured during the fiscal year, under authority of the Secretary of War, at Fort Leavenworth Military Prison, viz, fifty-nine mess tables and one hundred and sixteen benches, \$699.26.

STABLE-BROOMS AND HANDLES.

There were manufactured during the fiscal year, under authority of the Secretary of War, at Fort Leavenworth Military Prison, viz:

2,000 stable brooms	\$750 00
680 stable-broom handles	47 60
Or a total cost, as reported, of	797 60

STOVES AND RANGES AND STOVE FURNITURE.

There were delivered to the Quartermaster's Department during the fiscal year a stock of extra castings, for Army heaters now in use, at the Rock Island Arsenal, at a total cost of \$5,154.36.

The following-described articles of stove furniture were, under authority of the Secretary of War, manufactured at Fort Leavenworth Military Prison, viz:

1,156 wash boilers, Army range	\$1,424 67
535 coffee boilers, Army range	269 28
914 tea kettles, Army range	395 21
336 steamers, Army range	91 56

446 pot covers, Army range.....	\$28 99
500 bake pans, Army range, large.....	207 50
762 bake pans, small, Army range.....	188 59
24 wash boilers, F. and S., special.....	54 26
301 wash boilers, without, special.....	346 90
6 wash boilers with iron bands, F. and S., special.....	13 14
6 wash boilers with iron bands, without, special.....	8 94
225 coffee boilers, F. and S., special.....	297 50
174 coffee boilers, without, special.....	99 18
2 coffee boilers, F. and top S.....	5 30
48 round boilers, F. and S., special.....	91 84
84 round boilers, without, special.....	89 32
78 square boilers, F. and S., special.....	161 46
385 square boilers, without, special.....	587 98
25 copper boilers, F. and S., special.....	112 67
106 copper boilers, without, special.....	375 77
6 galvanized-iron boilers, without, special.....	49 62
60 coffee pots, special.....	9 90
155 tea kettles, special.....	70 78
20 tea kettles, copper, special.....	30 00
34 steamers, special.....	11 22
2 pot covers, special.....	16
230 bake pans, large, special.....	86 82
89 bake pans, small, special.....	16 02
24 tin pans, special.....	2 16
12 ash pans, special.....	2 04
144 stove-pipe, common, 4-inch.....	12 48
400 stove-pipe, common, 4½-inch.....	40 00
2,129 stove-pipe, common, 5-inch.....	227 09
233 stove-pipe, common, 5½-inch.....	27 96
11,921 stove-pipe, common, 6-inch.....	1,519 93
4,408 stove-pipe, common, 7-inch.....	925 68
810 stove-pipe, common, 8-inch.....	170 10
335 stove-pipe, common, 9-inch.....	94 92
57 stove-pipe, common, 10-inch.....	15 25
10 stove-pipe, common, 12-inch.....	4 60
53 stove-pipe, Russia, 5-inch.....	16 38
800 stove-pipe, Russia, 6-inch.....	330 67
18 T-joints, common.....	3 06
65 elbows, common, 4-inch.....	3 57
229 elbows, common, 4½-inch.....	14 31
914 elbows, common, 5-inch.....	66 27
126 elbows, common, 5½-inch.....	10 08
2,379 elbows, common, 6-inch.....	190 32
686 elbows, common, 7-inch.....	100 51
216 elbows, common, 8-inch.....	37 80
37 elbows, common, 9-inch.....	7 03
14 elbows, common, 10-inch.....	3 36
2 elbows, common, 12-inch.....	54
62 elbows, Russia, 5-inch.....	6 51
18 elbows, Russia, 5½-inch.....	2 35
265 elbows, Russia, 6-inch.....	47 70
84 fine thimbles.....	3 92
108 collars.....	4 86
18 safes.....	6 84

Or a total cost, as reported, of 9,022 87

VETERINARY SUPPLIES.

During the fiscal year, under Army Regulations, 322, veterinary supplies were purchased from the Medical Department to the value of \$2,266.95, against the cost of \$13,332.28 for the fiscal year 1884-'85, and \$9,072.28 for the fiscal year 1883-'84.

This saving has been effected by the operation of General Order No. 64, Adjutant General's Office, 1884, which greatly reduced the number and quantity of veterinary supplies for Army use. This revised list has been found to be sufficient to meet the needs of the service.

ILLUMINATING SUPPLIES.

During the fiscal year 417 pendent lamps, 802 bracket lamps, 51 street lamps, 1,853 lanterns (oil and candle combined), and the necessary chimneys, wicks, and various extra parts required for expenditure and repairs, were purchased at a cost of \$13,925.33.

Seven hundred and sixty gallons of gasoline were purchased, at a cost of \$497.20.

Three hundred and nineteen thousand nine hundred and ninety gallons of mineral oil were purchased in 5-gallon cans, in wooden cases of 2 cans each, at a cost of \$49,470.51.

The aggregate expenditure on account of illuminating supplies was \$63,893.04.

The money received from sales of illuminating supplies to officers reverts to the appropriation for regular supplies.

ESTIMATES AND REQUISITIONS.

Estimates for annual supplies and miscellaneous requisitions have been received and acted upon during the fiscal year, as follows:

From Division of the Atlantic	413
From Division of the Missouri	730
From Division of the Pacific	317
From general depots, independent posts, &c.....	410
Total	1,970

There were also received during the fiscal year 8,515 letters on the subjects of regular supplies and contracts, and 7,183 letters written upon the same business.

CONTRACTS.

During the year ending June 30, 1886, 1,323 contracts were received, examined, and filed in this office. Seven hundred and seventy were for 112,566 cords of wood, 145,220,900 pounds of coal, 45,280 bushels of charcoal, 17,348,777 pounds of corn, 32,000,297 pounds of oats, 8,731,823 pounds of barley, 2,993,600 pounds of bran, 85,802,339 pounds of hay, 7,449,300 pounds of straw, 53,740 pounds of shorts, and 53,740 pounds of middlings; 14 were for indefinite quantities of fuel, forage, and straw; 5 for work on national cemeteries; 2 for disinterment and reburial of soldiers' remains; 1 for erection of soldiers' monument; 83 for clothing, camp and garrison equipage; 16 for horses and mules; 92 for transportation; 65 for buildings; 1 for stationery; 1 for lamp chimneys; 8 for miscellaneous supplies; 8 for supplying water; 3 for drilling wells; 1 for flag-staff; 137 for services; 30 for building materials; 4 for mineral oil; 6 for shoeing public animals; 2 for stove parts; 1 for Army wagons; 4 for packing-boxes, and 69 contracts of lease.

MISCELLANEOUS CLAIMS AND ACCOUNTS.

There were on file at the beginning of the fiscal year 10,967 miscellaneous claims, amounting to \$6,640,701.42, and 227 accounts, amounting to \$82,524.67; in the aggregate, 11,194 claims and accounts, amounting to \$6,723,227.09. There were received during the year 1,276 claims and accounts, amounting, as presented, to \$2,325,650.35; total claims and accounts, 12,470, amounting to \$9,048,876.44.

Of these, 30 claims were approved for payment of \$34,322; 60 claims, amounting to \$15,685.20, were referred to other Departments, and 695 claims, amounting to \$80,706.83, were referred to the Third Auditor of the Treasury, for action of the accounting officers. Of the claims approved for payment and referred, a reduction of \$272,407.83 was made in their amount as presented, and 188 claims, amounting to \$42,296.03, were rejected, 356 accounts, amounting to \$33,677.49, were approved for payment, and a reduction made therein of \$199.70; 216 accounts, amounting to \$44,204.57, were referred to other Departments, and 7 accounts, amounting to \$8,661.20, were disallowed.

The total number of miscellaneous claims and accounts upon which final action was taken during the year is 1,552, amounting to \$532,160.85; 10,669 claims and 249 accounts, amounting in the aggregate to \$8,516,715.59, remained on hand at the end of the fiscal year awaiting action.

Among the claims remaining on hand there are included a large number of vouchers for quartermasters' stores purchased and for services rendered, which were issued by officers of the Quartermaster's Department, and have been forwarded to this office from time to time for safe-keeping, the whereabouts of the original owners or claimants being unknown to the Department.

The majority of the miscellaneous claims are for services rendered by colored men as teamsters and laborers during the late war. Owing to the ignorance of the claimants as to the names of the quartermasters who employed them, and the dates their services were rendered, the examination of the reports of officers to verify the statements of the claimants involves much time and labor on the part of the clerks engaged upon the investigation of these claims.

During the fiscal year 382 requisitions were issued by this office upon the Public Printer for printing and binding. The cost for this work, as shown by the records of this office, was \$12,978.33.

Statement of claims and accounts in the transportation branch, Quartermaster-General's Office, for the fiscal year ending June 30, 1886.

	Number.	Amount.
Accounts and claims suspended and awaiting action July 1, 1885	26	\$20,135 94
Accounts received during the fiscal year	3,157	1,103,229 82
Claims received during the fiscal year	49	47,588 23
Total accounts and claims on hand and received	3,232	1,170,953 99
Accounts referred for settlement in the fiscal year	3,111	1,110,216 16
Claims referred for settlement in the fiscal year	37	43,957 56
Accounts and claims rejected in the fiscal year	16	8,203 26
Accounts and claims suspended in the fiscal year	16	6,409 29
Total accounts and claims referred, rejected, and suspended in the fiscal year	3,180	1,163,786 27
Accounts awaiting action July 1, 1886	52	7,157 72
Claims awaiting action July 1, 1886		
Total number and amount on hand July 1, 1886	52	7,167 72

Statement of miscellaneous claims and accounts in the Quartermaster-General's Office for the fiscal year ending June 30, 1886.

	Number.	Amount.
On hand July 1, 1885, which had previously been suspended or had received no decisive action:		
Claims	10, 967	\$6, 640, 701 42
Accounts	227	82, 524 67
Claims received during the fiscal year	11, 194	6, 723, 226 09
Accounts received during the fiscal year	675	2, 238, 862 59
	601	86, 787 76
Total number on hand and received	12, 470	9, 048, 876 44
Claims approved	30	34, 322 00
Claims referred to other Departments	60	15, 685 20
Claims referred to Third Auditor for action of accounting officers	695	80, 700 83
Reduction on claims approved and referred		272, 407 83
Claims rejected	188	42, 296 03
Accounts approved	356	33, 677 49
Reduction on accounts approved		199 70
Accounts referred to other Departments	216	44, 204 57
Accounts rejected	7	8, 661 20
Total upon which final action has been taken	1, 552	532, 160 85
Remaining on hand July 1, 1886:		
Claims	10, 669	8, 434, 146 12
Accounts	249	82, 569 47
Total number and amount	10, 918	8, 516, 715 59

The following-described papers accompany this report, viz:

A.—Statement of all troops and property transported under direction of the Quartermaster's Department during the fiscal year ending June 30, 1886.

B.—Table showing principal movements of troops during the fiscal year ending June 30, 1886.

C.—Statement of vessels owned or purchased by the Government and employed in the Quartermaster's Department during the fiscal year ending June 30, 1886.

D.—Statement of vessels chartered, impressed, or employed by the Quartermaster's Department during the fiscal year ending June 30, 1886.

E.—Abstracts of contracts for wagon and water transportation entered into by the Quartermaster's Department received at the Office of the Quartermaster-General during the fiscal year ending June 30, 1886.

F.—Statement showing in detail cost of transportation of the Army during the fiscal year ending June 30, 1886, arranged by items and according to departments and independent posts and depots, together with a statement of the number of persons and pounds of freight transported.

I am, general, very respectfully, your obedient servant,

C. G. SAWTELLE,

Deputy Quartermaster-General, U. S. Army.

Brig. Gen. S. B. HOLABIRD,

Quartermaster-General U. S. Army.

A.—Statement of all troops and property transported under direction of the Quartermaster's Department during the fiscal year ending June 30, 1886.

	By railroad.	By water.*	By wagon.	By stage.	By Govern- ment ves- sels.	Grand total
Passengers:	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Officers	1, 497	92	.....	706	42, 992	45, 287
Men	27, 420	2, 118	.....	3, 685	157, 670	190, 893
Total	28, 917	2, 210	.....	4, 391	200, 662	236, 180
Animals:						
Horses	5, 285	334	.....	.....	93	5, 712
Mules	2, 181	11	.....	.....	3	2, 195
Total	7, 466	345	.....	.....	96	7, 907
Stores:	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
Subsistence	47, 893, 453	5, 709, 499	43, 215, 524	.....	1, 282, 745	98, 101, 221
Quartermaster's ..	70, 056, 396	5, 801, 946	81, 729, 217	.....	2, 465, 013	160, 052, 572
Ordnance	16, 627, 894	5, 841, 324	11, 324, 122	.....	961, 277	34, 754, 617
Medical	1, 464, 975	347, 402	2, 987, 828	.....	210, 122	5, 010, 327
Signal Service	832, 756	189, 584	240, 711	.....	4, 017	1, 267, 068
Miscellaneous	6, 376, 635	974, 595	7, 867, 334	9, 180	5, 969, 713	21, 197, 457
Total	143, 252, 109	18, 864, 350	147, 364, 736	9, 180	10, 892, 887	320, 383, 262

* Not including transportation on vessels owned by the Government.

B.—Table showing principal movements of troops during the fiscal year ending June 30, 1886.

Regiment and company.	From De- partment of—	To Depart- ment of—	Stations before move- ment.	Stations after movement.
Second Cavalry:				
A	California...	Arizona	Presidio of San Fran- cisco, Cal	The field, Arizona.
K	do	do	do	Do.
Third Cavalry:				
D	Texas	Missouri	Fort Davis, Tex	Fort Sill, Ind. T.
H	do	do	do	Do.
K	do	do	do	Fort Elliott, Tex.
Sixth Infantry:				
Headquarters ..	Platte	Missouri	Fort Douglas, Utah	Fort Leavenworth, Kans.
Eighth Infantry:				
A	California...	Arizona	Benicia Barracks, Cal. ..	Bowie Station, Ariz.
B	do	do	do	Do.
C	do	do	Angel Island, Cal	Do.
D	do	do	San Diego Barracks, Cal.	Do.
E	do	do	Fort Halleck, Nev.	Do.
H	do	do	Angel Island, Cal	Do.
K	do	do	do	Do.

C.—Statement of vessels owned or purchased by the Government and employed in the Quartermaster's Department during the fiscal year ending June 30, 1886.

Names.	Class.	Tonnage.	When purchased or built.	Estimated cost or value.	By whom employed.	Where employed.	Amount paid for repairs.	Amount paid for running expenses, including crew's wages.	Total expenses.
Resolute.....	Steam tug.....	70.30	Nov. 14, 1879	\$17,947 46	Depot quartermaster.....	Boston, Mass.....	\$1,096 40	\$8,429 20	\$9,525 60
Monroe.....	Steam launch....	62.35	Nov. 30, 1875	15,200 00	Post quartermaster.....	Fort Adams, R. I.....	155 00	2,379 75	2,534 75
Atlantic.....	Steam tug.....	60.31	Oct. 15, 1878	13,865 56	.....do.....	Governor's Island, New York Harbor.	2,880 31	9,165 36	12,045 67
Barrancas.....	Steam launch....	28.01	Nov. 7, 1874	5,750 00	.....do.....	Fort Barrancas, Fla.....	58 94	1,830 00	1,888 94
General Wool.....	Propeller.....	97.00	Sept. 1, 1883	27,870 80	.....do.....	Fort Monroe, Va.....	833 00	4,562 72	5,395 72
General Greene*.....	Steam launch....	25.20	Mar. 3, 1874	5,250 00	.....do.....	Governor's Island, New York Harbor.	470 34	231 74	702 08
Thayer.....	do.....	32.36	Oct. 8, 1874	7,200 00	.....do.....	Governor's Island, David's Island, Fort Wadsworth, and Fort Hamilton, New York Harbor.	.....	2,506 15	2,506 15
Belle of the Bay.....	Sloop.....	16.00	July 25, 1882	275 00	.....do.....	Saint Francis Barracks, Fla.	65 00	.....	65 00
Hamilton.....	Steam launch....	37.68	Feb. 1, 1875	7,800 00	Depot quartermaster.....	David's Island, New York Harbor.	115 65	3,903 99	4,019 64
Chester A. Arthur.....	Steamer.....	178.70	June 30, 1876	26,000 00	Lieut. Col. H. C. Hodges, deputy quartermaster-general.	New York Harbor.....	6,192 95	110,619 40	16,792 35
Ordnance.....	Propeller.....	75.00	June 30, 1876	18,000 00	.....do.....	do.....	946 83	16,714 10	7,660 98
General McPherson.....	do.....	104.23	Sept. 1, 1867	40,000 00	Chief quartermaster, Division of the Pacific.	San Francisco Harbor, Cal.	1,497 82	18,365 93	19,863 75
Amelia Wheaton.....	Steam launch....	40.00	Aug. 24, 1880	8,000 00	Lieut. S. E. Clark, acting assistant quartermaster.	Fort Cœur d'Alène, Idaho.....	.....	165 06	165 00
Dispatch.....	do.....	15.00	Nov. 28, 1879	3,510 00	Capt. W. S. Patten, assistant quartermaster.	Vancouver depot, Wash....	553 83	1,459 80	2,013 63
Lillie Lee.....	Steam yacht....	40.00	July 23, 1879	\$6,075 00	Post quartermaster, Fort Totten, Dak.	Devil's Lake, Dak.....	21 70	5 68	27 38
Total.....							14,867 82	70,338 82	85,206 64

*Crew furnished from steamer Atlantic.

†Run under charter, the United States furnishing fuel.

‡Run under contract.

§Without machinery, \$2,500.

QUARTERMASTER-GENERAL.

D.—Statement of vessels chartered, impressed, or employed by the Quartermaster's Department during the fiscal year ending June 30, 1886.

Name.	Class.	Ton- nage.	When chartered.	Period of service.		Rate of pay.	Amount paid.	Remarks.
				From—	To—			
Favorite ¹	Sloop.	6.50	July 1, 1877	July 1, 1885	June 30, 1886	50 cents per 1,000 pounds.	\$158 19	Yearly contract to freight stores.
Stella ²	Str....	(³)	July 24, 1885	July 24, 1885	July 24, 1885	\$38 for trip	38 00	
Mary Wittich ³	Str....	(³)	Nov. 30, 1885	Nov. 30, 1885	Nov. 30, 1885	\$30 for trip	30 00	
Native ⁴	Sloop.	8	Nov. 15, 1876	July 1, 1885	June 30, 1886	\$25 per month	300 00	Carrying mails and supplies between Mobile and Forts Morgan and Gaines, Ala.
Nellie ⁵	Sloop.	6	Not known..	July 1, 1885	Dec. 31, 1885	\$20 per month	120 00	} Carrying mails and supplies between Biloxi and Ship Island, Miss.
Do ⁵	Sloop.	6	do	Jan. 1, 1886	June 30, 1886	\$15 per month	90 00	
Relief ⁶	Schr.	(³)	Oct. 1, 1885	Oct. 1, 1885	June 30, 1886	\$50 per month	450 00	Carrying mails and supplies between Key West and Fort Jefferson, Fla.
Thomas Kiley ⁷	Str....	67 12	July 1, 1885	July 1, 1885	July 30, 1885	\$67 per day	972 50	Including engineer and fireman. (Hire, \$837.50; coal, \$135.)
Sylvan Dell ⁸	Str....	(³)	Aug. 7, 1885	Aug. 7, 1885	Aug. 8, 1885	\$150 per day	300 00	Including entire crew.
Barge Atlanta ⁹	Barge.	(³)	Aug. 8, 1885	Aug. 8, 1885	Aug. 8, 1885	\$67 per day	67 00	Do.
Tug A. C. Nickerson ¹⁰	Tug.	(³)	Aug. 8, 1885	Aug. 8, 1885	Aug. 8, 1885	\$80 per day	98 00	Including entire crew. (Hire, \$80; coal, \$18.)
James Bowen ¹¹	Str....	67.12	Aug. 8, 1885	Aug. 8, 1885	Aug. 8, 1885	\$80 per day	50 00	Including entire crew. (Hire, \$40; coal, \$10.)
Lloyd ¹²	Str....	(³)	Oct. 12, 1885	Oct. 12, 1885	Oct. 12, 1885	\$80 per day	99 00	Including entire crew. (Hire, \$80; coal, \$19.)
James Bowen ¹³	Str....	67.12	Oct. 19, 1885	Oct. 19, 1885	Oct. 31, 1885	\$67 per day	991 06	Including engineer and fireman. (Hire, \$871; coal, \$120.06.)
Do ¹⁴	Str....	67.12	Nov. 1, 1885	Nov. 1, 1885	Nov. 30, 1885	\$67 per day	2,315 79	Including engineer and fireman. (Hire, \$2,010; coal, \$305.79.)
Osseo ¹⁵	Str....	(³)	Nov. 2, 1885	Nov. 2, 1885	Nov. 29, 1885	\$67 per day	2,175 62	Including engineer and fireman. (Hire, \$1,943; coal, \$231.62.)
James Bowen ¹⁶	Str....	67.12	Dec. 1, 1885	Dec. 1, 1885	Dec. 12, 1885	\$67 per day	946 54	Including engineer and fireman. (Hire, \$804; coal, \$142.54.)
Osseo ¹⁷	Str....	(³)	Dec. 1, 1885	Dec. 1, 1885	Dec. 31, 1885	\$67 per day	2,324 65	Including engineer and fireman. (Hire, \$2,077; coal, \$247.65.)
Do ¹⁸	Str....	(³)	Jan. 1, 1886	Jan. 1, 1886	Jan. 31, 1886	\$67 per day	2,294 62	Including engineer and fireman. (Hire, \$2,077; coal, \$217.62.)
Do ¹⁹	Str....	(³)	Feb. 1, 1886	Feb. 1, 1886	Feb. 12, 1886	\$67 per day	912 80	Including engineer and fireman. (Hire, \$804; coal, \$108.80.)
A. C. Nickerson ²⁰	Tug.	(³)	Feb. 13, 1886	Feb. 13, 1886	Feb. 13, 1886	\$80 per day	136 23	With entire crew. (Hire, \$80; coal, \$56.23.)
Allen ²¹	Str....	(³)	Mar. 2, 1886	Mar. 2, 1886	Mar. 3, 1886	\$67 per day	85 00	Including engineer and fireman. (Hire, \$67; coal, \$18.)
James Bowen ²²	Str....	67.12	Mar. 3, 1886	Mar. 3, 1886	Mar. 17, 1886	\$67 per day	1,108 00	Including engineer and fireman. (Hire, \$971; coal, \$137.)
Do ²³	Str....	67.12	Apr. 7, 1886	Apr. 7, 1886	Apr. 12, 1886	\$67 per day	525 81	Including engineer and fireman. (Hire, \$402; coal, \$123.81.)
John E. Moore ²⁴	Str....	(³)	Apr. 15, 1886	Apr. 15, 1886	Apr. 24, 1886	\$67 per day	767 55	Including engineer and fireman. (Hire, \$670; coal, \$97.55.)
Greenwich ²⁵	Str....	(³)	June 12, 1886	June 12, 1886	June 12, 1886	\$80 per day	91 72	With entire crew. (Hire, \$80; coal, \$11.72.)
Do ²⁶	Str....	(³)	June 19, 1886	June 19, 1886	June 30, 1886	\$67 per day	892 77	Including engineer and fireman. (Hire, \$804; coal, \$88.77.)

'General Miles'.....	Tug ..	(⁵)	Apr. 11, 1885	July 1, 1885	June 30, 1886	\$775 per month ...	9,316 20	Hire, \$9,300; extra detentions, \$1,620. Not used exclusively by the Quartermaster's Department.
Sea Lion ⁴	Tug ..	(⁵)	June 17, 1885	July 1, 1885	July 14, 1885	\$75 per day	900 00	
Do ⁵	Tug ..	(⁵)	June 17, 1885	Oct. 13, 1885	Oct. 27, 1885	\$75 per day	525 00	
Neptune ⁶	Tug ..	(⁵)	Mar. 26, 1886	Mar. 29, 1886	Apr. 5, 1886	\$60 per day	420 00	
Total							29,502 05	

¹Charter-money payable at Fort Adams, R. I.; employed by post quartermaster.

²Charter-money payable at New Orleans, La.; employed by post quartermaster, Fort Barrancas, Fla.

³Unknown.

⁴Charter-money payable at New Orleans, La.; employed by Lieut. F. B. Jones, Third Infantry.

⁵Charter-money payable at New Orleans, La.; employed by depot quartermaster.

⁶Charter-money payable at New York City; employed by Lieut.-Col. H. C. Hodges.

⁷Charter-money payable at Portland, Oreg.; employed by Maj. A. S. Kimball, quartermaster.

⁸Charter-money payable at San Francisco, Cal.; employed by Col. J. D. Bingham, assistant quartermaster-general.

E.—Abstract of contracts for wagon and water transportation entered into by the Quartermaster's Department received at the office of the Quartermaster-General during the fiscal year ending June 30, 1886.

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REPORT OF THE SECRETARY OF WAR.

Contracting officer.	Contractor.	Date of contract.	Date of expiration of contract.	Nature of contract, &c.	Rates.
Lieut. Col. Henry C. Hodges, depot quartermaster, New York City. Do.....	Abram Winters and Solon Winterbottom. Timothy Sullivan.....	June 30, 1885 July 8, 1885	June 30, 1886 June 30, 1886	Hauling in and around New York City. Take charge of and navigate the steamer Ordnance, pay and victual her crew. Hauling between Fort Adams and Newport, R. I.	Various. \$5,056 per annum, in equal monthly installments. 50 cents per 100 pounds.
Lieut. Frederick Fuger, acting assistant quartermaster, Fort Adams, R. I. Lieut. Col. Henry C. Hodges, depot quartermaster, New York City. Maj. G. C. Smith, quartermaster, U. S. Army, Baltimore, Md. Capt. Henry Metcalf, acting assistant quartermaster, Watervliet Arsenal, N. Y.	John Connolly..... Daniel Shea..... Thomas J. Conroy.... Michael Kennene.....	July 20, 1885 July 20, 1885 June 15, 1885 July 23, 1885	June 30, 1886 June 30, 1886 June 30, 1886 June 30, 1886	To furnish steamers to take the place of Chester A. Arthur, Atlantic, and Ordnance, in New York Harbor. Hauling in and around Baltimore, Md.. From Watervliet Arsenal to any freight depot in Troy, or Green Island, N. Y. From any freight depot in Troy or Green Island to Watervliet Arsenal. Between the arsenal dock and any of the storehouses of Watervliet Arsenal. Double team hauling by the day, 8 hours being a day's work.	\$67 per day for each vessel, and \$10 per hour when employed by the hour. 8 cents per 100 pounds. \$1.25 per load of 1,500 pounds or over, and 80 cents per 1,000 pounds or less for loads less than 1,500 pounds. \$1.20 per load of 1,500 pounds or over, and 7 cents per 100 pounds or less, for loads less than 1,500 pounds. 50 cents per load of 1,500 pounds or over, and 2 cents per 100 pounds for loads less than 1,500 pounds. \$4 per day.
Lieut. Col. H. C. Hodges, depot quartermaster, New York City. Do..... Do.....	Timothy Sullivan..... Joseph A. Baulsir..... Daniel Shea.....	May 6, 1886 May 6, 1886 May 23, 1886	June 30, 1887 June 30, 1887 June 30, 1887	Take charge of and navigate the steamer Ordnance, pay and victual her crew. Take charge of and navigate the steamer Chester A. Arthur, pay and victual her crew. Furnish steamers to take the place of Chester A. Arthur, Ordnance, and Atlantic.	\$5,056 per annum, in equal monthly installments. \$3,650 per annum, in equal monthly installments. \$67 per day for each steamer, including the engineer and fireman, when employed by the day, and \$10 per hour, including the engineer and fireman, when employed by the hour, and for the remainder of the crew, when required, \$13 per day.
Lieut. Col. H. C. Hodges, depot quartermaster, New York City.	Solon Winterbottom and Abram Winters.	May 23, 1886	June 30, 1887	Hauling in and around New York City.	Various.

Dp	Joseph A. Baulsle.....	June 13, 1885	June 30, 1886	Take charge of and navigate the steamer Chester A. Arthur, pay and victual her crew.	\$8,650 per annum, in equal monthly installments on the last day of each month.
Col. R. Saxton, assistant quartermaster-general U. S. Army, Jeffersonville depot, Ind.	Amos B. Howard.....	May 28, 1886	June 30, 1887	Hauling to and from Jeffersonville depot, Ind., and other points in its vicinity. To and from railroad switch, north side of said depot: To and from Jeffersonville, Ind. To and from Louisville, Ky. To and from New Albany, Ind. To and from Portland, Ky. From one point to another in the city of Louisville, Ky.	8 cents per 100 pounds. 10 cents per 100 pounds. 20 cents per 100 pounds. Do. Do. 10 cents per 100 pounds.
Capt. M. J. Grealish, acting assistant quartermaster, Augusta Arsenal, Ga.	Anne Wood.....	June 8, 1886	June 30, 1887	Hauling in and around Augusta Arsenal, Ga.	\$1.50 per 100 pounds, or trip.
Lieut. Col. M. I. Ludington, depot quartermaster, Philadelphia, Pa.	William J. Crawford ..	June 17, 1886	June 30, 1887	Hauling in and around Philadelphia, Pa.	Various.
Capt. Henry Metcalf, ordnance acting assistant quartermaster, Watervliet Arsenal, N. Y.	Michael Kennene	June 19, 1886	June 30, 1887	Route No. 1: Between Watervliet Arsenal and any depot in Troy or Green Island, N. Y. Route No. 2: Double-team hauling by the day. Route No. 3: Single-team hauling by the day.	6 cents per 100 pounds. \$4 per day. \$2 per day.
Lieut. Col. R. N. Batchelder, depot quartermaster, Washington, D. C.	William Mitchell.....	Jan. 8, 1886	Feb. 27, 1886	Disinter the remains of United States soldiers from Post Cemetery, Governor's Island, New York Harbor, and remove and rebury them in Cypress Hills National Cemetery, near East New York, Long Island, N. Y.	\$3.97 for each body disinterred and reburied.
Lieut. James H. Baldwin, Eighteenth Infantry, acting assistant quartermaster, Fort Hays, Kans.	John Mack.....	July 13, 1885	June 30, 1886	Hauling between Fort Hays, Kans., and railroad station, Hays City, Kans.	3 cents per 100 pounds for the whole distance and 25 cents when less than 100 pounds.
Maj. James Gilliss, chief quartermaster, Department of the Missouri, Fort Leavenworth, Kans.	Moses Waters	May 22, 1885	June 30, 1886	Between the post of [Fort Riley and the railroad station at Fort Riley. Between the post of Fort Riley and the railroad station and Junction City.	3 cents per 100 pounds for the whole distance. 4 cents per 100 pounds for the whole distance.
Do.....	David Wood.....	May 21, 1885	June 30, 1886	Between cantonment on Uncompahgre, Colo., and Montrose, Colo.	15 cents per 100 pounds for the whole distance.
Do.....	José Mascarimis.....	May 23, 1885	June 30, 1886	Between Fort Lyon, Colo., and West Las Animas, Colo.	11 cents per 100 pounds for the whole distance.
Do.....	John Wahler.....	May 23, 1885	June 30, 1886	Between all points on the military reservation of Fort Leavenworth, Kans.	2 cents per 100 pounds for the whole distance; coal 43 cents per ton of 2,000 pounds between any and all points on the reservation.

E.—Abstract of contracts for wagon and water transportation entered into by the Quartermaster's Department, &c.—

Contracting officer.	Contractor.	Date of contract.	Date of expiration of contract.	Nature of contract, &c.	Rates.
Maj. James Gilliss, chief quartermaster, Department of the Missouri, Fort Leavenworth, Kans.	John Wahler	May 23, 1885	June 30, 1886	Between any and all points on the military reservation, and any and all points in the city of Fort Leavenworth, Kans.	3 cents per 100 pounds for the whole distance.
Capt. E. B. Atwood, assistant quartermaster, Santa Fé, N. Mex.	S. W. Bear	Sept. 25, 1885	June 30, 1886	Between Fort Marcy, N. Mex., military reservation, and railroad depot at Santa Fé, N. Mex.	4 cents per 100 pounds for the whole distance.
Lieut. B. H. Gilman, Thirteenth Infantry, acting assistant quartermaster, Fort Wingate, N. Mex.	Robert Carr	Oct. 5, 1885	June 30, 1886	Hauling 350 saw logs from the log camps, Fort Wingate military reservation, to saw-mill at Fort Wingate, N. Mex.	\$15 per 1,000 feet of logs, board measure.
Maj. James Gilliss, chief quartermaster, Department of the Missouri, Fort Leavenworth, Kans.	William Peroival	Nov. 10, 1885	June 30, 1886	Between post at Fort Gibson and the railroad station at Gibson or Muskogee, Ind. T.	19 cents per 100 pounds for the whole distance.
Capt. L. E. Campbell, assistant quartermaster, Fort Leavenworth, Kans.	William H. Crilly	June 19, 1885	June 30, 1886	Passenger transportation (omnibus, herdic, or spring wagon) between Leavenworth City and Fort Leavenworth, Kans.	5 cents for each person transported between the points named.
Lieut. C. C. Morrison, acting assistant quartermaster, Rock Island Arsenal, Illinois.	John Carroll	Nov. 27, 1885	June 30, 1886	Hauling from yards, Coal Mining Company, Rock Island, to Rock Island, Ill.	1½ cents per bushel of 80 pounds.
Do	F. D. Sieberling	Nov. 30, 1885	June 30, 1886	Hauling between points on the island of Rock Island and the cars on the track.	\$4 per car-load.
				Hauling between the island of Rock Island and the town of Davenport, Iowa, and Moline, Ill.	\$100 per car-load.
Maj. James Gilliss, chief quartermaster, Department of the Missouri, Fort Leavenworth, Kans.	Franklin Reaves	Apr. 7, 1886	June 30, 1887	Route No. 2, between Kiowa, Kans., and Fort Elliot, Tex., 186.86 miles.	\$1.09 per 100 pounds per 100 miles for transportation between any and all points within the boundaries of the route.
Do	John A. Coalton	Apr. 7, 1886	June 30, 1887	Route No. 1, between Caldwell, Kans., and Fort Reno, Ind. T., 111 miles.	91 cents per 100 pounds per 100 miles between any and all points within the boundaries of the route.
Do	O. P. Wood	Apr. 7, 1886	June 30, 1887	Route No. 4, between Harold, Tex., and Fort Elliot, Tex., 145 miles.	\$1.08 per 100 pounds per 100 miles between any and all points within the boundaries of the route.
Capt. A. L. Varney, acting assistant quartermaster, Rock Island Arsenal, Illinois.	John Carroll	June 15, 1886	June 30, 1887	Hauling from yards, Coal Mining Company, Rock Island to Rock Island Arsenal, Illinois.	2 cents per bushel of 80 pounds.

Capt. L. E. Campbell, assistant quartermaster, Fort Leavenworth, Kans.	George M. Crilly	May 29, 1886	June 30, 1887	Passenger transportation between Leavenworth City and Fort Leavenworth, Kans.; omnibus, herdie, or spring wagon.	5 cents for each person transported between the points named.
Maj. C. W. Foster, depot quartermaster, Saint Louis, Mo.	Timothy Ryan	May 10, 1886	June 30, 1887	Hauling to and from East Saint Louis, Ill.; From and to places in the city of Saint Louis, Mo., including United States clothing depot. From and to places in the city of Saint Louis, including railway depots and boat landings and other places in the city of Saint Louis. From and to places in the city of Saint Louis exclusive of clothing depot.	6 cents per 100 pounds. 4 cents per 100 pounds. 2½ cents per 100 pounds.
Maj. G. B. Dandy, chief quartermaster, Department of the Platte, Omaha, Nebr.	Edgar A. Ely	Nov. 24, 1885	June 30, 1886	Hauling in and around Carter, Wyo.	1½ cents per 100 pounds for coal; 1¼ cents per 100 pounds, grain in sacks; 1 cent per 100 pounds for all other classes of stores.
Do.....	E. J. Baker and Iver Johnson.	Apr. 30, 1886	June 30, 1887	Route No. 3, between Cheyenne quartermaster's depot and Fort McKinney, Wyo., 286 miles.	\$3.34 per 100 pounds for the whole distance; \$1.17 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	C. D. Chrisman	Apr. 30, 1886	June 30, 1887	Route No. 4, between Rawlins, Wyo., and Fort McKinney, Wyo., 216 miles.	\$2.65 per 100 pounds for the whole distance; \$1.75 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	Howard Winston	Apr. 30, 1886	June 30, 1887	Route No. 6, between Carter Station, Wyo., and Fort Bridger, Wyo., 11 miles.	16½ cents per 100 pounds for the whole distance; \$2.97 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	Tilman C. Graham	Apr. 30, 1886	June 30, 1887	Route No. 7, between Custer Station, Northern Pacific Railway, Mont., and Fort McKinney, Wyo., 162 miles.	\$1.62 per 100 pounds for the whole distance; \$1.62 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	George Berry	Apr. 30, 1886	June 30, 1887	Route No. 8, between any point on line of Fremont, Elkhorn and Missouri Valley Railroad and Fort McKinney, Wyo.	91 cents per 100 pounds per 100 miles between line of Fremont, Elkhorn and Missouri Valley Railroad and Fort McKinney, Wyo.; \$1 per 100 pounds per 100 miles between any and all other points within the boundaries of the route, including Fort Laramie, Wyo.
Do.....	Mathew R. Farris	May 20, 1886	June 30, 1887	Route No. 11: Hauling between Valentine, Nebr., and Fort Niobrara, Nebr., from or into cars at Valentine, Nebr.	8 cents per 100 pounds for coal and grain in sacks, and all other classes of stores; 20 cents per head transferring horses, mules, and cattle from or into cars.
Do.....	Peter Hamma and J. L. Murray.	Apr. 29, 1886	June 30, 1887	Hauling between Cheyenne and Cheyenne Depot, Wyo.	5 cents per 100 pounds for coal; 6 cents for grain in sacks; 9 cents for other classes of stores; 40 cents per head for horses, mules and cattle.

E.—Abstract of contracts for wagon and water transportation entered into by the Quartermaster's Department, &c.—Continued.

Contracting officer.	Contractor.	Date of contract.	Date of expiration of contract.	Nature of contract, &c.	Rates.
Maj. G. B. Dandy, chief quartermaster, Department of the Platte, Omaha, Nebr.	Peter Hamma and J. L. Murray.	Apr. 29, 1886	June 30, 1887	Hauling between Cheyenne and Fort D. A. Russell, Wyo.	10 cents per 100 pounds for coal; 6 cents for grain in sacks; 18 cents for other classes of stores; 40 cents per head for horses, mules, and cattle.
				Hauling between Cheyenne Depot and Fort D. A. Russell, Wyo.	5 cents per 100 pounds for coal; 6 cents for grain in sacks; 9 cents for other classes of stores; 40 cents per head for live stock, horses, mules, and cattle.
Do.....	E. R. Cleete	Apr. 27, 1886	June 30, 1887	Hauling between Salt Lake City and Fort Douglas, Utah.	6½ cents per 100 pounds for coal; 6 cents for grain in sacks; 6½ cents for all other classes of stores.
Do.....	William Clark.....	Apr. 29, 1886	June 30, 1887	Hauling in and around Ogden, Utah ..	75 cents per wagon-load of 1,500 pounds or less; 5 cents per 100 pounds when the quantity exceeds 1,500 pounds.
Do.....	A. E. Bradbury	Apr. 29, 1886	June 30, 1887	Hauling in and around Carter Station, Wyo.	3 cents per 100 pounds for coal, grain in sacks, and all classes of stores; 25 cents per head for transferring horses, mules, and cattle from and into cars.
Do.....	Charles J. Johnson ...	Apr. 29, 1886	June 30, 1887	Hauling in and around Rawlins, Wyo.	2 cents per 100 pounds for coal; 1½ cents for grain in sacks, and 2 cents for all other classes of stores.
Do.....	Fennimore Chatterton	Apr. 29, 1886	.....	Hauling in around Fort Fred. Steele, Wyo.	3½ cents per 100 pounds for coal; 3 cents for grain in sacks; 5 cents per 100 pounds for all other classes of stores; 50 cents per head for transferring horses, mules, and cattle from or into cars.
Do.....	Peter Johnson.....	Apr. 29, 1886	June 30, 1887	Hauling at Sidney and Fort Sidney, Nebr.	1½ cents per 100 pounds for coal; 3 cents for grain in sacks; 4 cents per 100 pounds for all other classes of stores; 25 cents per head for transferring horses, mules, and cattle from or into cars.
Do.....	George Berry.....	Mar. 18, 1886	June 30, 1886	Hauling in and around Chaldron, Nebr.	2½ cents per 100 pounds.
Maj. G. B. Dandy, chief quartermaster, Department of the Missouri, Omaha, Nebr.	William Dalton.....	Apr. 29, 1886	June 30, 1887	Hauling in and around Omaha, Nebr..	2½ cents per 100 pounds for coal and grain in sacks; 3½ cents per 100 pounds for all other classes of stores.
Do.....	.....do.....	Apr. 29, 1886	June 30, 1886	Hauling between Omaha and Fort Omaha, Nebr.	4½ cents per 100 pounds for coal; 4½ cents for grain in sacks; 4½ cents per 100 pounds for all other classes of stores.
Do.....	Howard Winston	Apr. 30, 1886	June 30, 1887	Route No. 6: Between Carter Station, Wyo., and Fort Bridger, Wyo., 11 miles.	16½ cents per 100 pounds for the whole distance, and \$2.97 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.

Lieut. Col. James M. Moore, chief quartermaster Department of Dakota, Fort Snelling, Minn.	Fletcher M. Towar ...	June 26, 1885	June 30, 1886	Hauling in and around Saint Paul, Minn.	1½ cents per 100 pounds.
Do.....	Paul McCormick	May 1, 1885	June 30, 1886	Hauling between Saint Paul and Fort Snelling, Minn.	7½ cents per 100 pounds.
Do.....	Singleton Buford	May 1, 1885	June 30, 1886	Route No. 2: Between Custer Station, Mont., and Fort Custer, Mont., 30 miles.	33½ cents per 100 pounds for the whole distance, and \$1.12½ per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	John W. Powers	May 1, 1885	June 30, 1886	Route No. 3: Between Custer Station, Mont., and Fort Maginnis, Mont., 110 miles.	\$1.27 per 100 pounds for the whole distance, and \$1.50 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	do	May 1, 1885	June 30, 1886	Route No. 4: Between Broadwater Landing, Mont., and Fort Assinaboine, Mont., 110 miles.	\$1.54 per 100 pounds for the whole distance, and \$1.34 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	Frank Palmer	May 1, 1885	June 30, 1886	Route No. 5: Between Helena, Mont., and Fort Assinaboine, Mont., 196 miles.	\$2.18 per 100 pounds for the whole distance, and \$1.20 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	Walter B. Jordan.....	Apr. 12, 1886	June 30, 1887	Route No. 6: Between Bartlett, Dak., and Fort Totten, Dak., 35 miles.	45 cents per 100 pounds for the whole distance, and \$1.50 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	Paul McCormick	Apr. 12, 1886	June 30, 1887	Route No. 1: Between Glendive, Mont., and Camp Poplar River, Mont., 88 miles.	\$2.31 per 100 pounds for the whole distance, and \$1.20 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	Frank S. Whitney....	Apr. 12, 1886	June 30, 1887	Route No. 2: Between Custer Station, Mont., and Fort Custer, Mont., 30 miles.	26 cents per 100 pounds for the whole distance, and \$1 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	Charles E. Conrad....	Apr. 12, 1886	June 30, 1887	Route No. 3: Between Custer Station, Mont., and Fort Maginnis, Mont., 110 miles.	\$1.15 per 100 pounds for the whole distance, and \$1.20 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	do	Apr. 12, 1886	June 30, 1887	Route No. 4: Between Broadwaters Landing, Mont., and Fort Assinaboine, Mont., 110 miles.	\$1.39 per 100 pounds for the whole distance, and \$1.24 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	Francis M. Shook	Apr. 12, 1886	June 30, 1887	Route No. 5: Between Helena, Mont., and Fort Assinaboine, Mont., 196 miles.	\$2.09 per 100 pounds for the whole distance, and \$1.09 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	Grace J. Hansen	Apr. 12, 1886	June 30, 1887	Route No. 6: Between Fort Totten, Dak., and Totten Station, Dak., 11 miles.	17 cents per 100 pounds per 100 miles for the whole distance.
				Route No. 7: Between Webster, Dak., and Fort Sisseton, Dak., 23 miles.	31 cents per 100 pounds for the whole distance, and \$1.50 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.

E.—Abstract of contracts for wagon and water transportation entered into by the Quartermaster's Department, &c.—Continued.

Contracting officer.	Contractor.	Date of contract.	Date of expiration of contract.	Nature of contract, &c.	Rates.
Lieut. Col. James M. Moore, chief quartermaster Department of Dakota, Fort Snelling, Minn.	James Kervin	Apr. 12, 1886	June 30, 1887	Route No. 8: Between Bismarck, Dak., and Fort Yates, Dak., 60 miles.	70 cents per 100 pounds for the whole distance, and \$1.75 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	Fred. T. Evans	Apr. 12, 1886	June 30, 1887	Route No. 10: Between East Pierre, Dak., and Fort Meade, Dak., 177 miles.	\$1.75 per 100 pounds for the whole distance, and \$1.70 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	Asel Kyes	Apr. 12, 1886	June 30, 1887	Route No. 11: Between Rapid City, Dak., and Fort Meade, Dak., 80 miles.	31 cents per 100 pounds for the whole distance, and \$1 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Maj. J. G. O. Lee, chief quartermaster Department of Texas, San Antonio, Tex.	Edward Troboese and August Santleben.	June 12, 1885	June 30, 1886	Hauling in and around San Antonio, Tex.	Various.
Do.....	Charles Nauwald	May 12, 1885	June 30, 1886	Route No. 1: Between Abilene, Tex., and Fort Concho, Tex., 85½ miles.	84½ cents per 100 pounds for the whole distance, and 96 cents per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	Edward Walker	May 12, 1885	June 30, 1886	Route No. 2: Between Marfa, Tex., and Fort Davis, Tex., 22 miles.	22 cents per 100 pounds for the whole distance, and 95 cents per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	Manuel Guerra	May 12, 1885	June 30, 1886	Route No. 3: Between Fort McIntosh, Tex., and Fort Ringgold, Tex., 120 miles.	\$1 per 100 pounds for the whole distance, and \$1 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	William Kelly	May 12, 1885	June 30, 1886	Route No. 4: Between Fort Brown, Tex., and Fort Ringgold, Tex.; whole distance by river, 300 miles; by land, 117 miles.	Officers and clerks, \$12 each; enlisted men, laundresses, and employes, \$6 each; animals, \$12 each; freight, 60 cents per 100 pounds.
Maj. A. J. McGonnigle, chief quartermaster Department of Texas, San Antonio, Tex.	Howard C. Niccolls...	May 12, 1886	June 30, 1887	Between Abilene, Tex., and Fort Concho, Tex., 95 miles.	71 cents per 100 pounds for the whole distance, and 75 cents per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	A. C. Hutchinson, president Morgan's Louisiana and Texas Railroad and Steamship Company.	May 12, 1885	June 30, 1886	Between New Orleans and Galveston.. Between New Orleans and Corpus Christi.	Freight, 30 cents per 100 pounds; ammunition, 90 cents per 100 pounds; officers and clerks, each, \$10; enlisted men, employes, &c., each, \$5; animals, each, \$7.50. Freight, 60 cents per 100 pounds; ammunition, \$1.80 cents per 100 pounds; officers and clerks, each, \$25; enlisted men, employes, &c., each, \$12; animals, each, \$15.

				Between New Orleans and Brazos Santiago.	Freight, 60 cents per 100 pounds; ammunition, \$1.80 cents per 100 pounds; officers and clerks, each, \$30; enlisted men, employés, &c., each, \$12; animals, each, \$15.
				Between Galveston and Corpus Christi.	Freight, 60 cents per 100 pounds; ammunition, \$1.80 cents per 100 pounds; officers and clerks, each, \$15; enlisted men, employés, &c., each, \$7.50; animals, each, \$12.
				Between Galveston and Brazos Santiago.	Freight, 60 cents per 100 pounds; ammunition, \$1.80 cents per 100 pounds; officers and clerks, each, \$22; enlisted men, employés, &c., each, \$12; animals, each, \$15.
De.....	Edgar G. Gliem	May 25, 1886	June 30, 1887	Between Marfa, Tex., and Fort Davis, Tex., 22 miles.	17.7 cents per 100 pounds for the whole distance, and 95 cents per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	M. Dentz.....	May 25, 1886	June 30, 1887	Between Fort McIntosh, Tex., and Fort Ringgold, Tex., 120 miles.	\$1.47 per 100 pounds for the whole distance, and \$1.22½ per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Maj. G. H. Weeks, quartermaster, U. S. A., San Francisco, Cal.	Nathaniel Hutson	June 20, 1885	June 30, 1886	Hauling in and around San Francisco, Cal.	Various.
Do.....	William Edmister	June 20, 1885	June 30, 1886	Hauling between San Francisco and the Presidio of San Francisco, Fort Mason, Cal., and Fort Winfield Scott, Cal.	Do.
Col. J. D. Bingham, chief quartermaster Department of California, Presidio of San Francisco, Cal.	D. W. Earl	Apr. 17, 1886	June 30, 1886	Route No. 1: Between Reno, Nev., and Fort Bidwell, Cal.	\$3.90 per 100 pounds for the whole distance, and \$2.25 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	Parlan W. Cunningham.	Apr. 17, 1886	June 30, 1887	Route No. 2: Between Winnemucca, Nev., and Fort McDermitt, Nev.	\$1.24 per 100 pounds for the whole distance, and \$1.75 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Maj. A. J. McGonnigle, chief quartermaster Department of Arizona, Whipple Barracks, Ariz.	Alexander G. Oliver.	May 12, 1885	June 30, 1886	Route No. 1: Between Ash Fork and Whipple Barracks, Ariz.	\$1.29 per 100 pounds for the whole distance.
				Route No. 1: Between Ash Fork and Fort Verde, Ariz.	\$2.20 per 100 pounds for the whole distance.
				Route No. 1: Between Ash Fork and Fort McDowell, Ariz.	\$3.32 per 100 pounds for the whole distance.
				Route No. 1: Between Maricapo and Whipple Depot, Ariz.	\$2.99 per 100 pounds for the whole distance.
				Route No. 1: Between Maricapo and Fort McDowell, Ariz.	99 cents per 100 pounds for the whole distance.
				Between any and all other points within the boundaries of the route.	\$2.25 per 100 pounds per 100 miles.
Do.....	Adolph Solomon.....	May 12, 1885	June 30, 1886	Route No. 2: Between Bowie Station and Fort Bowie, Ariz.	27½ cents per 100 pounds for the whole distance.
				Route No. 2: Between Bowie Station and Fort Grant, Ariz.	47½ cents per 100 pounds for the whole distance.

E.—Abstract of contracts for wagon and water transportation entered into by the Quartermaster's Department, &c.—Continued.

Contracting officer.	Contractor.	Date of contract.	Date of expiration of contract.	Nature of contract &c.	Rates.
Maj. A. J. McGinnigle, chief quartermaster Department of Arizona, Whipple Barracks, Ariz.	Adolph Solomon.....	May 12, 1885	June 30, 1886	Route No. 2: Between Bowie Station and Fort Thomas, Ariz. Route No. 2: Between Bowie Station and San Carlos, Ariz. Between any and all other points within the boundaries of the route.	72½ cents per 100 pounds for the whole distance. \$1.11 per 100 pounds for the whole distance. \$1.10 per 100 pounds per 100 miles.
Do.....	Lewis A. Grant and Arthur G. Wells.	May 12, 1885	June 30, 1886	Route No. 3: Between Holbrook and Fort Apache, Ariz., 80 miles.	\$1.48 per 100 pounds for the whole distance, and \$1.65 per 100 pounds per 100 miles between any and all points within the boundaries of the route.
Do.....	Mariana G. Samaniego.	May 15, 1885	June 30, 1886	Route No. 4: Between Tucson and Fort Lowell, Ariz.	13 cents per 100 pounds for the whole distance.
Do.....	D. Wilmet Wickersham.	July 21, 1885	June 30, 1886	Between Bowie Station, Ariz., and Lang's Ranch. Between Bowie Station, Ariz., and Cloverdale. Between Bowie Station, Ariz., and Guadalupe Canyon. Between Bowie Station, Ariz., and Skeleton Canyon. Between any and all other points within the boundaries of the route, east of a north and south line running through the camp at Guadalupe Canyon. West of said line.....	\$1.15 per 100 pounds for the whole distance. \$1.10 per 100 pounds for the whole distance. \$1.28½ per 100 pounds for the whole distance. 80 cents per 100 pounds for the whole distance. \$1.05 per 100 pounds per 100 miles.
Lieut. Col. C. A. Reynolds, chief quartermaster Department of the Columbia, Vancouver Barracks, Wash.	George M. Mitchell...	Apr. 23, 1886	June 30, 1887	Route No. 1: Between Spokane Falls, Wash., and Fort Spokane, Wash., 60 miles.	\$1.14½ per 100 pounds per 100 miles. 75 cents for the whole distance; \$1.25 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	John F. Loealey.....	Apr. 23, 1886	June 30, 1887	Route No. 2: Between Ashland, Oreg., and Fort Klamath, Oreg., 99 miles.	\$2.20 per 100 pounds for the whole distance, and \$2.20 per 100 pounds per 100 miles between any and all other points within the boundaries of the route.
Do.....	Frank A. Nourse.....	Apr. 23, 1886	June 30, 1887	Route No. 3: Between Kuna, Idaho, and Boise Barracks, Idaho, 15 miles.	25 cents per 100 pounds for the whole distance, and \$1.50 per 100 pounds per 100 miles, between any and all other points within the boundaries of the route.

Do.....	L. A. Loomis	Apr. 30, 1886	June 30, 1887	From Astoria, Oreg., to Fort Canby, Wash. From Astoria, Oreg., to Fort Canby, Wash., touching at Fort Stevens, Oreg.	\$24 per trip, seven round trips per week. \$27 per trip, seven round trips per week; \$6 per hour for extra detention at Fort Canby, Wash.; \$9 per hour for extra detention at Fort Stevens, Oreg., \$6 per hour for extra detention at Ilwaco, Wash.
Capt. A. L. Varney, acting assistant quartermaster, Rock Island Arsenal, Ill.	Thomas Bernes.....	June 15, 1886	June 30, 1887	Hauling between Rock Island Arsenal and the railway depots and wharves in the cities of Davenport, Rock Island, and Moline. Between all points at the arsenal and the cars on the arsenal tracks.	\$1 per load of less than 1,500 pounds, and 5 cents per 100 pounds per load of 1,500 pounds and over. 1½ cent per 100 pounds.

F.—Statement showing in detail cost of transportation of the Army during the fiscal year ending June 30, 1886, with a recapitulation.

This statement includes expenses for rail, water, wagon, and stage transportation; for purchase of draft animals; for purchases and repairs of Army and spring wagons, ambulances, and harness; for supplying posts with water and sewerage and digging wells; for purchasing, repairing, operating, and chartering vessels; for building and repairing wharves and wharfage, and for clearing roads, constructing temporary bridges, and removing obstructions from roads, harbors, and rivers; prepared from reports of disbursing officers in each military department, at each depot of the Quartermaster's Department, and at each independent military post, armory, and arsenal; together with a statement of the number of persons and pounds of freight transported under direction of the Quartermaster's Department during the fiscal year appropriated by Congress, act March 3, 1885, \$2,900,000.

Respectfully submitted.

C. G. SAWTELLE,

Deputy Quartermaster-General, U. S. Army,

QUARTERMASTER-GENERAL'S OFFICE,

October 1, 1886.

FOR RAIL TRANSPORTATION.

[Excluding allowances for services of the bonded Pacific railroad companies \$488,761.06 (see page 130), and of certain land-grant railroad companies, \$125,000, (see page 136).]

Department, depot, or post.	By accounts paid prior to July 1, 1886.		By outstanding accounts unsettled July 1, 1886.		Total cost of services performed during the fiscal year.	Number of persons transported under direction of the Quartermaster's Department during the fiscal year ending June 30, 1886.	Pounds of freight transported under direction of the Quartermaster's Department during the fiscal year ending June 30, 1886.
	For passengers.	For freight.	For passengers.	For freight.			
The East.....	\$3,572 44	\$8,162 21	\$195 52	\$3,756 74	\$15,986 91	1,614	3,627,110
The Missouri.....	31,401 00	104,840 24	16,302 43	54,107 56	206,651 23	2,471	23,453,455
The Platte.....	921 62	3,670 53	60 01	279 75	4,931 91	3,551	22,021,907
Dakota.....	13,617 92	27,032 71	3,994 06	15,525 26	60,169 95	5,100	14,268,855
Texas.....	12,475 07	35,631 20	7,897 98	16,350 80	72,355 65	2,301	8,023,131
California.....	1,981 30	.....	.....	.....	1,981 30	997	90,536
Arizona.....	.....	28 74	.....	.....	28 74	3,454	9,731,555
The Columbia.....	1,452 49	11,823 50	258 42	2,973 89	16,508 30	375	2,861,237
New York City.....	18,101 81	10,154 83	4,429 39	3,560 09	30,246 12	1,899	4,300,071
Washington, D. C.....	3,556 58	2,754 39	469 95	482 57	7,263 49	2,805	382,220
Philadelphia.....	2,048 46	3,157 48	209 49	544 06	5,960 09	157	2,271,976
Jeffersonville, Ind.....	.....	.....	.....	.....	.....	46	5,459,452
Louisville, Ky.....	3,481 38	9,882 22	656 50	1,554 85	15,574 95	.....	.....
San Francisco, Cal.....	405 50	2,649 10	115 00	335 56	3,525 16	346	8,146,528
Saint Louis, Mo.....	34,895 13	24,117 59	4,755 29	12,233 53	76,001 34	1,411	7,526,025
Chicago, Ill.....	20,345 25	41,531 36	5,687 91	19,814 87	87,379 39	170	23,280,796
United States Military Prison, Fort Leavenworth, Kans.....	.....	4 55	.....	1 80	6 35	679	716,042
Atlanta, Ga.....	.....	.....	.....	.....	.....	47	41,691
Jefferson Barracks, Mo.....	.....	.....	.....	.....	.....	2	11,727
David's Island, New York Harbor.....	5 00	.....	.....	.....	5 00	250	.....
Columbus Barracks, Ohio.....	12,779 99	482 04	532 95	.....	13,794 98	1,183	16,162
West Point, N. Y.....	98	9 80	.....	97	11 75	7	22,950
Willels Point, N. Y.....	.....	105 00	.....	.....	105 00	.....	.....
Rock Island Arsenal, Ill.....	.....	.....	.....	.....	.....	.....	1,599,905
Watervliet Arsenal, N. Y.....	.....	.....	.....	.....	.....	10	444,560
Fort A. Lincoln, ordnance depot, Dakota.....	.....	.....	.....	.....	.....	9	.....
Benicia Arsenal, Cal.....	.....	.....	.....	.....	.....	3	342,296
Watertown Arsenal, Mass.....	8 25	.....	.....	.....	8 25	.....	141,331
Frankford Arsenal, Pa.....	87 00	.....	.....	.....	87 00	2	2,806,561
Augusta Arsenal, Me.....	.....	.....	.....	.....	.....	.....	175,139
Kennebec Arsenal, Me.....	.....	2 22	.....	.....	2 22	.....	1,534

F.—Statement showing in detail cost of transportation of the Army, &c.—Continued.

FOR RAIL TRANSPORTATION—Continued.

Department, depot, or post.	By accounts paid prior to July 1, 1886.		By outstanding accounts unsettled July 1, 1886.		Total cost of service performed during the fiscal year.	Number of persons transported under direction of the Quartermaster's Department during the fiscal year ending June 30, 1886.	Pounds of freight transported under direction of the Quartermaster's Department during the fiscal year ending June 30, 1886.
	For passengers.	For freight.	For passengers.	For freight.			
Indianapolis Arsenal, Ind.....						4	531,969
Allegheny Arsenal, Pa.....	\$8 00				\$8 00	5	964,145
National Armory, Springfield, Mass.....						3	491,213
Quartermaster-General's Office and the Treasury.....	50,966 87	\$170,516 49	\$31,472 65	\$62,945 31	315,901 32		
Total.....	212,412 64	456,556 20	77,037 55	194,488 01	940,494 40	28,917	143,252,109

FOR WATER TRANSPORTATION.

The East.....	\$724 33	\$12,108 92	\$9 00	\$1,277 69	\$14,119 94	\$137,738	\$4,880,960
The Missouri.....			12 30		12 30	2	
The Platte.....						1	
Dakota.....	1,498 97	25,323 62	102 54	2,273 68	20,198 81	209	4,520,678
Texas.....	32 00	3,384 88		435 67	3,852 55	31	763,275
California.....	30 00	20 00			50 00	33,178	2,244,603
Arizona.....	6 00	1,715 85		84 24	1,810 09	32	260,750
The Columbia.....	5,287 03	14,703 94	174 60	1,920 58	22,086 15	167	2,342,586
New York City.....	720 52	6,561 38	502 50	1,804 90	9,589 30	10,769	10,965,322
Washington, D. C.....	84 00	519 99		14 61	568 80	680	50,486
Philadelphia.....	3 00	262 48		352 98	618 46	2	1,904
Jeffersonville, Ind.....							84
Louisville, Ky.....	129 00	116 31		13 48	263 79		
San Francisco, Cal.....	1,213 00	2,237 87	20 00	155 27	3,626 14	46	1,206,007
Saint Louis, Mo.....		2,727 48		154 82	2,882 30		796,187
Chicago, Ill.....	19 00	121,29		163 25	303 54	2	109,056
United States Military Prison, Fort Leavenworth, Kans.....						3	
Atlanta, Ga.....						1	3,716
David's Island, New York Harbor.....						19,983	891,047
Columbus Barracks, Ohio.....						20	
West Point, N. Y.....						8	11,221
Rock Island Arsenal, Ill.....							279,311
Watervliet Arsenal, N. Y.....							281,985
Benicia Arsenal, Cal.....							199,842
Frankford Arsenal, Pa.....							318,723
Kennebec Arsenal, Me.....							39,494
Quartermaster-General's Office and the Treasury.....	82 00	1,553 50			1,585 50		
Total.....	9,728 85	71,357 51	820 94	8,660 17	90,567 47	202,872	29,757,237

F.—Statement showing in detail cost of transportation of the Army, &c.—Continued.

FOR WAGON TRANSPORTATION.

Department, depot, or post.	For freight.		Total cost during the fiscal year.	Pounds of freight transported under direction of the Quartermaster's Department during the fiscal year ending June 30, 1886.
	By accounts paid prior to July 1, 1886.	By outstanding accounts unsettled July 1, 1886.		
The East.....	\$6,498 42	\$162 36	\$6,660 78	\$97 718
The Missouri.....	169,393 87	14,646 12	184,039 99	25,191 163
The Platte.....	45,852 83	11,207 65	57,060 48	22,613, 144
Dakota.....	62,329 16	3,650 19	65,985 35	8,453, 319
Texas.....	15,110 85	1,808 78	16,919 63	3,520, 997
California.....	13,854 48	2,894 09	16,748 57	599, 847
Arizona.....	90,093 27	12,261 16	102,354 43	23,852, 086
The Columbia.....	12,766 50	1,275 70	14,042 20	1,934, 254
New York City.....	6,882 10	878 10	7,760 20	6,523, 442
Washington, D. C.....	2,067 57	314 72	2,382 29	175, 758
Philadelphia, Pa.....	951 80	.....	951 80	2,442, 533
Jeffersonville, Ind.....	453 50	.....	453 50	} 5,603, 975
Louisville, Ky.....	643 09	.....	643 09	
San Francisco, Cal.....	3,170 01	321 92	3,491 93	14,967, 561
Saint Louis, Mo.....	5,635 75	.....	5,635 75	9,157, 570
Chicago, Ill.....	7,562 10	.....	7,562 10	18,631, 511
Atlanta, Ga.....	98 40	.....	98 40	18, 558
David's Island, New York Harbor.....	.....	.....	.....	.....
Rock Island Arsenal, Ill.....	1,334 60	147 00	1,481 60	1,986, 587
Watervliet Arsenal, N. Y.....	336 49	15 00	351 49	726, 545
Benicia Arsenal, Cal.....	175 24	.....	175 24	473, 602
Watertown Arsenal, Mass.....	5 00	.....	5 00	.....
Frankford Arsenal, Pa.....	878 84	.....	878 84	121, 231
Augusta Arsenal, Ga.....	314 53	.....	314 53	205, 091
Allegheny Arsenal, Pa.....	49 26	.....	49 26	49, 244
Quartermaster-General's Office and the Treasury.....	1,444 02	.....	1,444 02	.....
Total.....	447,401 68	49,528 79	496,930 47	174,364, 736

F.—Statement showing in detail cost of transportation of the Army, &c.—Continued.

FOR STAGE TRANSPORTATION.

Department, depot, or post.	By accounts paid prior to July 1, 1886.		By outstanding accounts unsettled July 1, 1886.		Total cost of service performed during the fiscal year.	Number of persons transported under direction of the Quartermaster's Department during the fiscal year ending June 30, 1886.	Pounds of extra baggage transported under direction of the Quartermaster's Department during the fiscal year ending June 30, 1886.
	For passengers.	For extra baggage.	For passengers.	For extra baggage.			
The East	\$5,547 50		\$2 00		\$5,549 50	20	52
The Missouri	8,148 31	\$51 95	1,384 40	\$39 96	9,684 62	461	1,237
The Platte	7,994 05	94 85	856 81		8,945 71	510	3,215
Dakota	7,729 92	65 42	2,023 00	16 85	9,835 19	785	2,653
Texas	1,317 00	73 40	210 25	11 25	1,611 90	598	400
California	48 00				48 00	245	
Arizona	5,558 71	136 82	1,506 55	82 74	7,284 82	1,204	1,623
The Columbia	2,191 00	23 10	323 50		2,537 60	237	
New York City	4 80				4 80	56	
Washington, D. C.						43	
Philadelphia, Pa.	13 50				13 50		
Jeffersonville, Ind.						1	
Louisville, Ky.	10 15				10 15		
San Francisco, Cal.	3,531 90	33 00	200 00	5 00	3,769 90	44	
Saint Louis, Mo.	22 25		50		22 75	97	
Chicago, Ill.						9	
United States Military Prison, Fort Leavenworth, Kans.						29	
Columbus Barracks, Ohio						50	
Watervliet Arsenal, N. Y.	5 00				5 00		
Fort A. Lincoln, ordnance depot, Dak.						2	
Frankford Arsenal, Pa.	17 50				17 50		
Quartermaster-General's Office and the Treasury	2,120 30				2,120 30		
Total	44,259 89	478 54	6,507 01	215 80	51,461 24	4,391	9,180

F.—Statement showing in detail cost of transportation of the Army, &c.—Continued.

FOR TRANSPORTATION EMPLOYÉS.

[Including agents, wagon-masters, teamsters, hostlers, wheelwrights, packers, harness-makers, crews of vessels, &c.]

Department, depot or post.	Civil-ians em- ployed in June, 1886.	En- listed men on extra duty in June, 1886.	By payments made prior to July 1, 1886.		By payments due and unpaid July 1, 1886.		Total cost of service during the fiscal year end- ing June 30, 1886.
			To civilian employés.	To en- listed men on extra duty.	To civil- ian em- ployés.	To en- listed men on extra duty.	
The East.....	53	69	\$38,414 31	\$8,819 41	\$395 00	\$331 65	\$47,960 87
The Missouri.....	146	17	126,267 84	9,235 22	5,290 64	271 10	141,064 80
The Platte.....	110	69	78,092 37	9,727 80	410 00	107 80	88,937 97
Dakota.....	225	101	132,780 05	12,990 30	242 78	23 80	146,036 93
Texas.....	76	105	41,461 77	13,229 05	640 00	382 55	55,713 37
California.....	52	32	40,263 94	3,611 64	85 00	114 80	44,073 38
Arizona.....	98	93	127,285 17	7,410 88	16,062 78	277 55	151,036 38
The Columbia.....	59	47	43,183 85	9,453 95	14 00		52,651 80
New York City.....	19		16,023 13				16,023 13
Washington, D. C.....	28		16,023 24		370 00	56 70	16,449 94
Philadelphia, Pa.....	7		7,139 88				7,139 88
Jeffersonville, Ind.....	28		12,412 62		192 00		12,604 62
San Francisco, Cal.....	7		4,329 96				4,329 96
Saint Louis, Mo.....	7		6,973 19				6,973 19
Chicago, Ill.....	9		7,374 92				7,374 92
United States Military Prison, Fort Leavenworth, Kans.....	1		1,350 50				1,350 50
Atlanta, Ga.....			18 00	2 15			20 15
Jefferson Barracks, Mo.....		8		1,070 20		96 10	1,166 30
David's Island, New York Har- bor.....	5	7	4,628 37	1,081 25			5,709 62
Columbus Barracks, Ohio.....		5		521 85			521 85
West Point, N. Y.....		30	225 00	2,957 10			3,182 10
Willeys Point, N. Y.....		5		460 73			460 73
Watervliet Arsenal, N. Y.....			8 60				8 60
Fort Abraham Lincoln, Ord- nance Depot, Dak.....	1		360 00				360 00
Benicia Arsenal, Cal.....	1		540 00				540 00
Watertown Arsenal, Mass.....			251 68				251 68
Frankford Arsenal, Pa.....	1		999 96				999 96
Quartermaster-General's Office and the Treasury.....			24 00				24 00
Total.....	933	605	707,032 35	30,571 53	23,702 20	1,602 05	812,968 13

FOR VESSELS.

Department, depot, or post.	By accounts paid prior to July 1, 1886.			By outstanding ac- counts unsettled July 1, 1886.		Total cost of service during the fiscal year ending June 30, 1886.
	Purchas- ing, operat- ing, and main- tain- ing.	Chartering from pri- vate par- ties.	Repairing.	Purchas- ing, operat- ing, and main- tain- ing.	Repairing.	
The East.....	\$9,566 20	\$101 31	\$2,772 77	\$5 00	\$296 50	\$12,741 78
The Missouri.....			51 38			51 38
Dakota.....	58 40		3 50			61 90
California.....	17,372 24	1,845 00	1,263 29	46,135 76		66,616 29
The Columbia.....	529 28	78 00	92 75			700 03
New York City.....	20,545 42	15,065 00	5,467 59	450 24	618 21	42,146 46
San Francisco.....	634 25					634 25
David's Island, New York Harbor.....	223 50		101 00		1,665 00	1,989 50
Total.....	48,939 29	17,089 31	9,752 28	46,591 00	2,879 71	124,961 59

F.—Statement showing in detail cost of transportation of the Army, &c.—Continued.

FOR MEANS OF TRANSPORTATION.

Department, depot, or post.	By payments made prior to July 1, 1886.		By amounts due and unpaid July 1, 1886.		Total cost during the fiscal year ending June 30, 1886.
	Purchasing.	Repairing and purchasing material for repairing.	Purchasing.	Repairing and purchasing material for repairing.	
The East.....	\$471 68	\$3,032 51	.....	\$7 00	\$3,511 19
The Missouri.....	2,319 60	7,393 35	.....	304 94	10,017 89
The Platte.....	2,245 80	3,669 50	.....	.....	5,915 30
Dakota.....	554 98	3,910 35	\$2 00	.....	4,467 33
Texas.....	1,265 20	5,442 47	.....	.....	6,707 67
California.....	98 90	1,677 75	.....	372 53	2,149 18
Arizona.....	.....	4,419 00	350 00	312 14	5,081 14
The Columbia.....	3,742 81	10,252 11	1,000 38	.....	14,995 30
New York City.....	765 95	2,044 46	.....	.....	2,810 41
Washington, D. C.....	323 50	561 65	.....	18 25	843 40
Philadelphia, Pa.....	1,910 55	701 28	.....	.....	2,611 83
Jeffersonville, Ind.....	9,995 47	1,141 90	10,091 73	.....	21,229 10
Louisville, Ky.....	.....	2 00	.....	.....	2 00
San Francisco, Cal.....	11,891 88	6,318 44	.....	.....	18,210 32
Saint Louis, Mo.....	75 00	334 64	.....	.....	409 64
Chicago, Ill.....	648 61	700 80	.....	.....	1,349 41
Atlanta, Ga.....	58 29	29 25	.....	.....	87 54
Jefferson Barracks, Mo.....	.....	157 49	.....	.....	157 49
David's Island, New York Harbor.....	64 00	200 94	.....	.....	264 94
Columbus Barracks, Ohio.....	331 05	81 17	.....	.....	412 22
West Point, N. Y.....	658 87	761 21	.....	.....	1,420 08
Total.....	37,422 14	52,772 27	11,444 11	1,014 86	102,653 38

FOR DRAFT ANIMALS AND HARNESS.

Department, depot, or post.	Number of horses purchased.	Number of mules purchased.	By payments made prior to July 1, 1886.			
			Horses and mules.	Stabling, watering, and attendance.	Harness.	
					Purchasing and manufacturing.	Repairing.
The East.....	5	14	\$4,305 25	\$35 13	\$646 72	\$149 88
The Missouri.....	.....	.....	24 00	2,845 39	2,590 86	369 48
The Platte.....	.....	.....	.....	51 76	2,567 47	4 50
Dakota.....	.....	.....	134 70	6,143 54	1,091 55	92 76
Texas.....	.....	.....	.....	537 18	2,394 44	.....
California.....	.....	4	600 00	231 06	2 00	28 12
Arizona.....	.....	.....	.....	3,310 37	201 00	.....
The Columbia.....	.....	.....	113 00	1,346 81	5,875 76	670 40
New York City.....	3	.....	766 00	1,438 77	413 29	59 54
Washington, D. C.....	4	.....	1,000 00	.....	38 50	136 00
Philadelphia, Pa.....	1	.....	190 00	98 87	35 40	49 95
Jeffersonville, Ind.....	.....	.....	.....	6 00	2,555 82	7 86
Louisville, Ky.....	.....	.....	.....	15 75	.....	.....
San Francisco, Cal.....	.....	.....	.....	1,493 65	15,899 28	188 80
Saint Louis, Mo.....	5	544	84,674 60	1,351 90	2,078 82	51 70
Chicago, Ill.....	.....	1	200 00	30 00	2,135 55	14 45
United States Military Prison, Fort Leavenworth, Kans.....	.....	.....	.....	801 95	11,307 90	2 00
Atlanta, Ga.....	.....	.....	.....	4 50	6 50	6 75
Jefferson Barracks, Mo.....	.....	.....	.....	39 00	.....	.....
David's Island, New York Harbor.....	.....	.....	.....	.....	20 00	.....
West Point, N. Y.....	.....	.....	.....	9 24	341 54	.....
Total.....	18	563	*92,007 55	19,790 27	50,202 50	1,832 19

REPORT OF THE SECRETARY OF WAR.

F.—Statement showing in detail cost of transportation of the Army, &c.—Continued.

FOR DRAFT ANIMALS AND HARNESS—Continued.

Department, depot, or post.	By amounts due and unpaid July 1, 1886.			Total costs during the fiscal year ending June 30, 1886.
	Horses and mules.	Stabling, watering, and attendance.	Harness, purchasing and repairing.	
The East			\$5 00	\$5, 141 98
The Missouri	\$93 50	\$910 01	88 90	6, 922 14
The Platte	11 00	8 00		2, 642 73
Dakota		117 59		7, 580 14
Texas		413 34		3, 344 96
California				861 18
Arizona		373 16		3, 884 53
The Columbia		22 29	15 00	8, 043 36
New York City				2, 677 00
Washington, D. C.				1, 174 50
Philadelphia, Pa.				\$374 22
Jeffersonville, Ind.			329 67	2, 899 35
Louisville, Ky.				15 75
San Francisco, Cal.				17, 581 73
Saint Louis, Mo.				88, 157 02
Chicago, Ill.				2, 380 00
United States Military Prison, Fort Leavenworth, Kans.			1, 025 62	13, 137 47
Atlanta, Ga.				17 75
Jefferson Barracks, Mo.				39 00
David's Island, New York Harbor				20 00
West Point, N. Y.				350 78
Total	104 50	1, 844 39	1, 464 19	167, 245 59

*Of the above amount the sum of \$790.45 was paid for the hire of horses, viz: In the East, \$615.75; in the Missouri, \$24; in Dakota, \$134.70; in New York City, \$16; and \$113 for the hire of mules in the Columbia.

FOR WATER SUPPLY AND SEWERAGE.

Department, depot, or post.	By payments made prior to July 1, 1886.				By amounts due and unpaid July 1, 1886.		Total cost during the fiscal year ending June 30, 1886.
	Digging wells.	Water rent and taxes.	Material purchased.	Constructing and repairing.	Water rent and taxes.	Material purchased and constructing and repairing.	
The East	\$549 00	\$4, 689 07	\$8, 669 98	\$17, 092 01	\$814 30	\$10, 193 20	\$41, 997 56
The Missouri	630 00	8, 988 00	9, 438 21	6, 790 31	200 00	289 70	26, 334 22
The Platte		6, 216 94	9, 736 50	314 76	12 60	1, 376 00	17, 656 20
Dakota	2, 500 00	237 47	9, 176 77	276 65	16 72	100 62	12, 308 23
Texas		8, 561 87	3, 377 07	11, 029 63			17, 968 37
California		1, 900 76	6, 663 86	2, 002 66	16 96	325 35	10, 909 59
Arizona		1, 700 00	41 59		582 32		2, 323 91
The Columbia		4, 722 00	16, 386 64	6, 238 25		1, 328 09	23, 674 98
New York City		374 97	3, 762 79	16 00	293 20	1, 580 00	6, 026 96
Washington City, D. C.		110 00				27 80	137 80
Philadelphia, Pa.		141 00	370 99				511 99
Jeffersonville, Ind.			1, 498 57	8 60			1, 507 47
Louisville, Ky.		14 00					14 00
San Francisco, Cal.		753 05	11, 181 74	35 00			11, 919 79
Saint Louis, Mo.		551 50	2, 542 04	86 80			3, 180 34
Chicago, Ill.		210 64	818 06		29 26		1, 052 96
Atlanta, Ga.			1 60				1 60
Jefferson Barracks, Mo.			2, 004 80	1, 823 50			3, 828 30
David's Island, New York Harbor	485 00	107 00	1, 550 65	4, 511 40			6, 654 05
Columbus Barracks, Ohio		1, 671 00	1, 423 48	10 00			3, 109 48
West Point N. Y.			70 91				70 91
Willels Point, N. Y.				291 50			291 50
Total	4, 164 00	35, 837 07	88, 776 07	50, 527 07	1, 964 76	15, 210 76	198, 480 21

F.—Statement showing in detail cost of transportation of the Army, &c.—Continued.

FOR WHARVES AND BRIDGES.

Department, depot, or post.	By payments made prior to July 1, 1886.			By amounts due and unpaid July 1, 1886.		Total cost during the fiscal year ending June 30, 1886.
	Constructing.	Repairing.	Rent of wharves and wharfage.	Constructing.	Rent of wharves and wharfage.	
The East	\$500 27	\$8,465 71	\$1,030 04	.....	\$20 00	\$10,016 02
Texas	951 24	430 72	18 91	.....	9 92	1,410 79
California .....	.....	2,430 00	1,440 00	.....	.....	3,870 00
The Columbia .....	.....	508 54	114 92	\$3,390 00	8 80	4,022 26
New York City .....	.....	559 80	9,037 24	.....	50 00	9,647 04
Louisville, Ky. ....	.....	.....	1 00	.....	.....	1 00
David's Island, New York Harbor .....	.....	597 00	192 50	.....	.....	789 50
Total	1,451 51	12,991 77	11,834 61	3,390 00	88 72	29,756 61

FOR ROADS, HARBORS, AND RIVERS.

Department, depot, or post.	By payments made prior to July 1, 1886.		By amounts due and unpaid July 1, 1886.		Total cost during the fiscal year ending June 30, 1886.
	Constructing roads.	Repairs and removal of obstructions.	Constructing roads.	Repairs and removal of obstructions.	
The East	\$1,432 25	\$698 85	.....	\$1,000 00	\$3,131 10
The Missouri	190 85	34 00	\$119 50	.....	344 35
The Platte	33 00	35 75	.....	.....	68 75
Dakota	93 00	67 10	.....	.....	160 10
Texas	2,040 74	1,725 36	433 91	.....	4,200 01
California .....	.....	228 00	.....	.....	228 00
The Columbia	3,060 92	548 49	.....	.....	3,609 41
New York City .....	.....	108 56	.....	.....	108 56
Philadelphia, Pa.	5,207 10	.....	.....	.....	5,207 10
Jeffersonville, Ind.	287 21	235 85	.....	.....	523 06
San Francisco, Cal.	21 00	.....	.....	.....	21 00
Total	12,366 07	3,681 96	553 41	1,000 00	17,601 44

F.—Statement showing in detail cost of transportation of the Army, &c.—Continued.

For tolls, advertisements, publications, and printing, and for expenses not enumerated in the foregoing statements; such as canvas, lumber, packing-boxes, loading vehicles, reimbursements, miscellaneous articles, &c.

Department, depot, or post.	By payments made prior to July, 1, 1886.			By amounts due and un- paid July 1, 1886.			Total cost during the fiscal year ending June 30, 1886.
	Tolls on turn- pikes, ferries, and bridges.	Advertisements, publications, and printing.	Expenses not enumerated.	Tolls on turn- pikes, ferries, and bridges.	Advertisements, publications, and printing.	Expenses not enumerated.	
The East.....	\$242 36	\$172 57	\$1,657 98	.....	\$56 80	\$263 90	\$2,393 61
The Missouri.....	1,084 87	282 57	2,271 50	\$30 60	13 52	390 25	4,073 31
The Platte.....	76 50	968 30	1,462 07	.....	.....	207 78	2,714 65
Dakota.....	1,902 75	330 49	2,711 26	53 25	.....	197 16	5,194 91
Texas.....	12 00	447 20	394 23	.....	23 00	.....	876 43
California.....	18 75	60 47	172 91	.....	.....	30 00	282 13
Arizona.....	27 00	254 46	874 25	25 58	284 98	352 72	1,818 99
The Columbia.....	1,820 10	135 12	842 78	84 37	22 00	1,140 10	4,050 47
New York City.....	65 50	1,140 18	1,054 02	.....	258 00	.....	3,117 70
Washington, D. C.....	103 00	12 00	.....	.....	.....	.....	115 00
Philadelphia, Pa.....	.....	8 00	5,598 42	.....	46 50	1,241 75	6,894 67
Jeffersonville, Ind.....	.....	632 97	4,032 13	.....	.....	8,966 50	8,631 60
Louisville, Ky.....	387 50	4 00	9 15	87 00	.....	11 15	498 80
San Francisco, Cal.....	6 60	57 48	3,593 56	.....	.....	.....	3,657 64
Saint Louis, Mo.....	.....	406 89	2,605 82	.....	176 40	.....	2,189 11
Chicago, Ill.....	.....	.....	142 00	.....	.....	.....	142 00
United States Military Prison, Fort Leavenworth, Kans.....	.....	3 34	1,198 80	.....	.....	.....	1,197 14
Atlanta, Ga.....	.....	.....	1 25	.....	.....	.....	1 25
Jefferson Barracks, Mo.....	.....	.....	206 00	.....	.....	.....	206 00
Dvaid's Island, New York Harbor.....	.....	.....	10 18	.....	.....	.....	10 18
Columbus Barracks, Ohio.....	.....	4 00	70 25	.....	.....	.....	74 25
West Point, N. Y.....	19 75	4 00	.....	50	.....	.....	24 25
Rock Island Arsenal, Ill.....	.....	.....	6 70	.....	.....	.....	6 70
Watervliet Arsenal, N. Y.....	.....	10 00	.....	.....	.....	.....	10 00
Quartermaster-General's Office and the Treasury.....	135 75	.....	152 09	.....	.....	.....	287 84
Total.....	5,908 43	4,934 04	29,662 35	281 30	881 20	7,801 31	49,468 63

RECAPITULATION.

Nature of accounts.	The East.	The Mis- souri.	The Platte.	Dakota.	Texas.
Rail.....	\$15,986 91	\$206,651 23	\$4,931 91	\$80,169 95	\$72,355 65
Water.....	14,119 94	12 30	.....	29,198 61	3,852 55
Wagon.....	6,060 78	184,039 99	57,060 48	65,985 35	16,919 63
Stage.....	5,849 50	9,648 02	8,945 71	9,835 19	1,611 90
Employees in the transportation service.....	47,960 37	141,064 80	88,937 97	148,036 93	55,713 37
Vessels.....	12,741 78	51 38	.....	61 90	.....
Means of transportation.....	3,511 19	10,017 89	5,915 30	4,467 33	6,707 67
Draft animals and harness.....	5,141 98	6,922 14	2,642 73	7,580 14	3,344 96
Water supply and sewerage.....	41,997 56	26,334 22	17,656 20	12,308 23	17,968 37
Wharves and bridges.....	10,016 02	.....	.....	.....	1,410 79
Roads, harbors, and rivers.....	3,181 10	344 35	68 75	160 10	4,200 01
Tolls on turnpikes, ferries, and bridges.....	242 36	1,115 47	76 50	1,956 00	12 00
Advertisements, publications, and print- ing.....	229 37	296 09	968 30	330 49	470 20
Expenses not enumerated.....	1,921 88	2,661 75	1,669 85	2,908 42	394 23
Total.....	169,210 74	589,196 23	188,873 70	340,968 84	184,961 33

F.—Statement showing in detail cost of transportation of the Army, &c.—Continued.

RECAPITULATION—Continued.

Nature of accounts.	California.	Arizona.	The Co- lumbia.	Depots, in- dependent posts, and arsenals.	Quarter- master- General's Office and Treasury.	Total.
Rail	\$1,981 30	\$28 74	\$16,508 30	\$245,979 09	\$315,901 32	\$940,494 40
Water	50 00	1,810 09	22,086 15	17,852 13	1,565 50	90,567 47
Wagon	16,188 57	102,354 43	14,042 20	32,235 02	1,444 02	496,930 47
Stage	48 00	7,284 82	2,537 60	3,843 60	2,120 30	51,461 24
Employés in the transporta- tion service.	44,075 38	151,036 38	52,651 80	85,467 13	24 00	812,968 13
Vessels	66,616 29	.....	700 03	44,780 21	.....	124,951 59
Means of transportation	2,149 18	5,081 14	14,995 30	49,808 38	.....	102,653 38
Draft animals and harness	861 18	3,884 53	8,043 36	128,824 57	.....	167,545 59
Water supply and sewerage.	10,909 59	2,323 91	28,674 98	38,307 15	.....	196,480 21
Wharves and bridges.	3,870 00	.....	4,022 26	10,437 54	.....	29,756 61
Roads, harbors, and rivers	228 00	.....	3,609 41	5,859 72	.....	17,601 44
Tolls on turnpikes, ferries, and bridges	18 75	52 58	1,910 47	669 85	135 75	6,189 73
Advertisements, publications, and printing	60 47	539 44	157 12	2,763 76	.....	5,815 24
Expenses not enumerated.	202 91	1,226 97	1,982 88	24,342 68	152 09	37,463 66
Total	147,259 62	275,623 03	171,921 86	691,170 83	321,362 98	3,080,579 16

7.—Report of Lieut. Col. B. C. Card, deputy quartermaster-general, U. S. A., of the operations of the claims branch during the fiscal year ending June 30, 1886.

QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., August 6, 1886.

GENERAL: I have the honor to submit the following report of the business of this office during the fiscal year ending June 30, 1886, so far as it relates to the investigation and adjudication of claims for quartermaster stores taken or furnished for the use of the Army during the war of the rebellion, in States not in insurrection, as provided for in section 300 A, Revised Statutes of the United States.

The third section of the act of March 3, 1879, provides that all claims for such stores not presented and filed prior to the 1st day of January, 1880, shall be forever barred. Consequently no new claims are now being received.

During the war, however, many claims were presented to certain military boards and commissions, appointed by department and district commanders, and received a greater or less investigation, but no final and complete action.

The Quartermaster-General in 1880 held that the presentation of claims before such boards and commissions was such a presentation and filing as to save them from being barred under the third section of the act of March 3, 1879. During the fiscal year last past, one hundred and twenty-nine of this class of claims have been called up in this office by the parties interested, and have been considered under the act of July 4, 1864, section 300 A, Revised Statutes of the United States.

In addition to the military board claims above referred to, there were a number of claims originally filed in this office, under act of July 4, 1864, during 1865 and 1866, which were returned prior to January 1, 1880, to the claimants or their attorneys for certain information. One hundred and six of this class of claims have been refiled in this office during the past fiscal year, and have been considered.

The following table shows the names of the agents employed, the total amount paid for salaries, for per diem, and for traveling expenses to each, the number of claims investigated, and the average cost of the investigation of claims for each agent for the past fiscal year:

Names of agents.	Period of service.		Amounts paid to each.			Total.	Number of claims investigated.	Cost per claim per investigation.
	From—	To—	Salary.	Per diem while traveling.	Expense of transportation.			
	1885.	1886.						
Britton, Wiley.....	July 1	June 30	\$1,400 00	\$1,074 00	\$734 30	\$3,208 30	211	\$15 20
Cooper, John S.....	do	do	1,400 00	1,008 00	244 95	2,652 95	154	17 23
Dougherty, J. C.....	do	do	1,400 00	1,092 00	385 55	2,877 55	143	20 12
Ekin, William M.....	do	do	1,400 00	1,035 00	375 15	2,810 15	145	19 38
Fitz, Henry E. §.....	do	do	1,400 00	831 00	217 75	2,448 75	150	16 32
Hawkins, Ernest.....	do	do	1,400 00	1,005 00	816 20	2,721 20	100	27 21
Kinsman, O. D.....	do	do	1,400 00	1 080 00	226 83	2,706 83	182	14 87
Latshaw, Henry C. §.....	do	do	1,400 00	863 00	237 00	2,590 00	118	21 95
Livsey, Joseph.....	do	do	1,400 00	1,077 00	119 50	2,596 50	156	16 64
Lynch, Alexander.....	do	do	1,291 12	818 00	306 00	2,515 12	141	17 84
Melendy, Peter §.....	do	do	1,400 00	1,092 00	104 65	2,596 65	138	18 82
Putman, James.....	do	do	1,400 00	1,041 00	190 70	2,631 70	165	15 95
Quinn, Timothy.....	do	do	1,400 00	1,014 00	199 85	2,613 85	147	17 78
Reeve, Arthur T. §.....	do	do	1,175 02	720 00	276 05	2,171 07	70	31 02
Salladé, Madisons.....	do	do	1,400 00	951 00	127 10	2,478 10	89	27 84
Saunders, Thomas J.....	do	do	1,400 00	1,002 00	101 50	2,503 50	98	25 55
Sawyer, Fred. A.....	do	do	1,400 00	1,086 00	398 16	2,884 16	169	17 07
Taylor, C. W.....	do	do	1,400 00	1,005 00	231 62	2,636 62	131	20 13
Thatcher, Thomas M.....	do	do	1,400 00	1,092 00	303 30	2,795 30	157	17 80
	1885.							
Hoffman, George E. *.....	do	Aug. 31	235 86	72 00	40 55	348 44	17	20 49
Ingalls, Rufus, 2d†.....	do	Sept. 30	350 00			350 00		
Woodburn, M. A. ‡.....	do	Oct. 1	350 00	216 00	32 50	598 50	27	22 17
	1886.							
Postwick, C. B. †.....	do	Feb. 15	878 49	612 00	378 48	1,868 97	145	12 89
Speel, Alexander R. ¶.....	do	Feb. 24	894 87	471 00	112 60	1,478 47	53	27 90
Total.....			28,975 36	20,457 00	5,660 29	55,002 65	2,906	-----
Average cost per claim by all the agents.....								18 96

* Discharged August 31, 1885.

† Discharged September 30, 1885.

‡ Discharged February 15, 1886.

§ Discharged June 30, 1886.

¶ Resigned October 1, 1885.

¶ Resigned February 24, 1886.

While the foregoing table shows the number of claims investigated and reported to this office by each agent, and the cost attending the same, still it does not fairly show the extent of service rendered by each agent, because while some claims are of such a character that but few hours would be required in their investigation and in making up the reports, and require but little travel and examination of but few witnesses, others demanded several days of investigation, the examination of many witnesses, and involved much travel and a large record.

The force of clerks and others employed by the Quartermaster-General in the investigation of claims under the statute herein referred to, as authorized by the act of March 3, 1885, making appropriation for legislative, executive, and judicial expenses of the Government, is as follows:

One clerk of class 4, two clerks of class 3, four clerks of class 2, eleven clerks of class 1, two clerks at \$1,000 each, eleven copyists, three assistant messengers, one watchman, and twenty-five agents at \$1,400 each.

The act of March 3, 1885, making appropriation for the payment of these persons, provides "that hereafter vacancies occurring in the offices of clerks and others provided for in this paragraph shall not be filled." Seventeen vacancies have occurred since the passage of this

act, viz: One clerk of class 3, three clerks of class 1, one clerk at \$1,000, one copyist, and eleven agents. Those vacancies have not, of course, been filled.

Under the provisions of the act of July 31, 1886, making appropriation for the legislative, executive, and judicial expenses of the Government for the current fiscal year, the force is further reduced to the following numbers and grades:

One clerk of class 4, one clerk of class 3, eight clerks of class 1, one clerk at \$1,000, one copyist, three assistant messengers, and ten agents at \$1,400 each.

The total number and amounts of claims investigated and reported upon by agents, and the amounts recommended by them for allowance, are as follows:

Between what dates.	Number of claims.	Amount claimed.	Amount recommended.
July 1, 1885, to June 30, 1886.....	2,906	\$1,816,751 02	\$273,944 08

It has been ascertained that many claims filed in this office prior to January 1, 1880, have never been taken up and accounted for. To correct such errors, thus far discovered, it became necessary during the past fiscal year to take up 3,587 claims, amounting to \$1,176,146.48.

The following statements show the number and amount of claims reported on hand July 1, 1885, number of claims taken up during the year to correct errors in reports prior to January 1, 1880, number of claims presented to military boards and commissions prior to January 1, 1880, and called up in the Quartermaster-General's Office during the last fiscal year; number of claims originally filed in 1865 and 1866, returned to claimants and attorneys and refiled during the last fiscal year; number of claims adjudicated by the Quartermaster-General, the amounts approved in full or in part, the amounts disallowed; and the number and the amount of those remaining on hand July 1, 1886.

	No.	Amount.
On hand July 1, 1885.....	4,928	\$4,442,371 10
Taken up to correct errors.....	3,587	1,176,146 48
Military boards and claims called up.....	129	} 235 153,876 73
Refiled claims.....	106	
Total on hand and received during the year.....	8,750	5,772,394 31

Upon the above, action was taken as follows:

	No.	Amount.
Approved in whole or in part.....	1,316	.....
Upon those claims (1,316) there was allowed \$235,243.32, and disallowed \$403,382.32.....	.....	\$638,625 64
Rejected.....	2,451	517,190 72
Total on which action was had.....	3,767	1,155,816 36
Remaining on hand July 1, 1886.....	4,983	4,616,577 95

These miscellaneous claims are principally such as have been referred to this office by the accounting officers of the Treasury. After receiving an administrative examination in this office they are returned, with an appropriate report in each case, for settlement under any law applicable. Besides these there are cases commonly known as "soldiers'" cases, being claims for private horses turned into regiments and appropriated to the public service. These, likewise, are classed as miscellaneous claims, and are examined, reported upon, and disposed of, as in the cases first above mentioned.

The claims of Elizabeth Carson, of Bourbon County, Kentucky, for fuel, subsistence stores, &c., stated at \$4,323.45, and Katherine C. B. Merrill, executrix of Ayres P. Merrill, deceased, late of Mississippi, for quartermaster and commissary stores and supplies, stated at \$99,675, acted upon in this office in compliance with the acts of January 20, 1885, and February 13, 1885, respectively, and which at the date of my last annual report were being prepared for report to Congress, have been completed and forwarded to the honorable the Secretary of War. The former on July 28, 1885, the latter on February 6, 1886, with recommendation for settlement at \$2,780.40 and \$50,382.50, respectively. The War Department subsequently transmitted the cases to Congress and they were closed by Treasury settlements as follows: No. 9994, of March 5, 1886, in the case of Elizabeth Carson, for \$2,780.40, and No. 1518, of May 20, 1886, in the Merrill case, for \$67,726.

The following statement shows the total number and aggregate amount of claims presented under section 300 A, Revised Statutes (act of July 4, 1864, &c.), and action thereon since the passage of the act:

[illegible]

RECAPITULATION.

Number of claims presented from July 4, 1864, to June 30, 1886.....	57,821
Number of claims approved in whole or in part from July 4, 1864, to June 30, 1886.....	18,329
Number of claims disallowed from July 4, 1864, to June 30, 1886.....	34,509
Total acted upon	52,838
Number on hand July 1, 1886	4,983
Amount of 57,821 claims presented.....	\$39,811,886 99
Amount of 52,838 claims acted upon	35,195,309 04
Remaining claims (4,983).....	4,616,577 95

Very respectfully, your obedient servant,

B. C. CARD,

Deputy Quartermaster-General, U. S. Army.

The QUARTERMASTER-GENERAL, U. S. ARMY.

8.—*Report of Capt. John F. Rodgers, military storekeeper, U. S. A., of the operations of the clothing-supply branch for the fiscal year ending June 30, 1886.*

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., September 15, 1886.

GENERAL: I have the honor to submit the annual report of the operations of this office, pertaining to clothing and equipage supplies, for the fiscal year ending June 30, 1886.

The appropriation by Congress for the purchase and manufacture of clothing, equipage, and materials, packing of same for transportation, pay of employes, and for all other incidental expenses connected with said purchase and manufacture was \$1,250,000.

The credits to the appropriation during the last fiscal year from sales to officers and on account of clothing drawn by enlisted men in excess of the allowance to which they are entitled by law and regulations was \$73,982.69, making the resources of the Department a total of \$1,323,982.69. Of this amount \$1,323,664.23 were sent to officers of the Department during the fiscal year to defray duly authorized expenditures payable from appropriation for clothing and equipage, leaving a balance of \$318.46 in the Treasury on the 30th of June last. As fast as the accounts of paymasters of the Army are adjusted, further credits will be made to last year's appropriation, nearly all of which will ultimately remain in the Treasury of the United States, as the outstanding obligations are few, involving only small sums.

During the fiscal year \$63,398.85 were realized at the general depots at Philadelphia, Pa., Jeffersonville, Ind., Saint Louis, Mo., and San Francisco, Cal., also at the Military Prison at Fort Leavenworth, Kans., from sales of old-pattern and unserviceable clothing and equipage, materials, cuttings, &c., which amount, as required by law, has been covered into the Treasury credited to miscellaneous receipts. The expenses connected with said sales amounted to \$326.41, which has been paid from the appropriation of clothing and equipage. The accompanying statement L gives the information in detail.

The supplies procured appear, with one single exception hereafter to be commented upon, to have given universal satisfaction. It certainly has been the endeavor of this office, as well as of the officers in charge of the general purchasing and manufacturing depots of the Quartermaster's Department, to procure supplies conforming in every respect to existing standards and specifications. A full compliance therewith is insisted upon with favorable results.

Reports from the Army represent the enlisted men as contented and satisfied, the quality of the clothing being good and the allowance provided for ample.

The accompanying statement A shows the quantities of clothing, equipage, and materials on hand on the 30th of June, 1885, at the general depots of the department and at the Fort Leavenworth Military Prison, the quantities purchased, manufactured, gained, sold, issued, transferred, expended, and the quantities remaining on hand on the 30th of June, 1886.

The principal articles purchased at the general depots of the Quartermaster-General's Department were :

Articles.	Quantity.	Articles.	Quantity.
Helmets	2, 973	Mattress-covers	18, 114
Cork helmets	9, 700	Pillows	20, 358
Forage caps	21, 825	Pillow-cases	42, 007
Campaign hats	17, 489	Bed-sheets	64, 000
Suspenders	19, 990	Mosquito-bars	1, 880
Knit undershirts	39, 000	Axes	3, 733
Woolen stockings	170, 000	Shovels	2, 800
Cotton stockings	183, 251	Scrubbing-brushes	16, 424
Berlin gloves	160, 109	Dark-blue coat cloth	18, 603
Woolen mittens	18, 197	Facing-cloth	7, 170
Fur gauntlets	5, 490	Cotton duck, for tents	230, 914
Leather gauntlets	13, 082	Brown duck, for fatigue clothing	146, 225
Arctic overshoes	2, 000	Canton-flannel	210, 091
Woolen blankets	33, 787	Blouse-flannel	118, 159
Wire-woven bunk bottoms	3, 200	Shirting-flannel	48, 662
Mattresses	20, 359	Kersey, all kinds	132, 902

The following are the principal articles which were manufactured during the past fiscal year at the general depots of the department :

Articles.	Quantity.	Articles.	Quantity.
Canvas caps	12, 035	Canvas fatigue trousers	13, 904
Overcoats	5, 951	Dark blue flannel shirts	21, 958
Overcoats, blanket-lined	803	Drawers	92, 067
Uniform dress-coats	4, 979	Canvas mittens	11, 925
Blouses	39, 046	Gold-lace chevrons	29, 727
Canvas fatigue-coats	14, 997	Cloth chevrons	12, 179
Stable-frocks	2, 281	Barrack bags	12, 633
Overalls	4, 010	Mattress covers	24, 624
Trousers	61, 423	Tents, all kinds	2, 536

Issues of the principal articles of clothing and equipage to posts, recruiting depots, and rendezvous from the general depots of the Quartermaster's Department during the last fiscal year have been as follows:

Articles.	Quantity.	Articles.	Quantity.
Helmets	6,602	Woolen mittens	12,514
Cork helmets	6,806	Fur mittens and gauntlets	7,771
Forage caps	43,299	Canvas mittens	11,947
Fur and canvas caps	12,194	Leather gauntlets	13,293
Campaign hats	20,818	Arctic overshoes	6,570
Overcoats	8,668	Woolen blankets	16,017
Fur and blanket-lined overcoats	1,076	Gold-lace chevrons	24,745
Uniform dress-coats	11,477	Cloth chevrons	10,018
Blouses	45,417	Barrack bags	10,434
Canvas fatigue-coats	24,036	Wire-woven bunk bottoms	14,320
Stable-frocks	3,698	Mattresses	17,704
Overalls	3,227	Mattress-covers	36,618
Trousers, kersey	70,278	Pillows	18,252
Trousers, canvas fatigue	24,304	Pillow-cases	33,636
Trousers, linen	1,386	Bed-sheets	71,001
Suspenders	12,507	Mosquito-bars	5,515
Flannel shirts	44,497	Axes	6,031
Knit undershirts	62,508	Shovels	1,923
Drawers	75,114	Tents, miscellaneous	3,074
Woolen stockings	150,053	Tents, shelter	11,272
Cotton stockings	142,673	Scrubbing-brushes	15,589
Boots, all kinds	26,102	Corn brooms	28,945
Shoes, all kinds	80,477	Barrack chairs	3,380
Berlin gloves	154,969		

The uniform dress-coat, blouses, overcoats, trousers, canvas fatigue-clothing, shirts, drawers, stable-frocks, overalls, tents, barrack bags, and mattress-covers are manufactured under the direct supervision of the officers in charge of the depots at Philadelphia, Pa., Jeffersonville, Ind., and San Francisco, Cal., from materials purchased by contract. The garments are cut according to the established patterns and are then given out to deserving sewing-women to be made up.

The following are the prices paid for making :

Articles.	Finer quality (Philadelphia).	Regulation quality.		
		Philadel-phia.	Jefferson-ville.	San Fran-cisco.
Overcoats		\$2 00		\$2 00
Uniform dress-coats :				
Privates	\$3 50	3 00		3 00
Musicians	4 00	3 50		3 50
Blouses	75	75	\$0 75	75
Trousers :				
Linen		25		
Mounted	1 25	1 00		1 00
Foot	1 00	75		75
Stable frocks		25	25	25
Overalls :				
Engineers		70		
Mounted		20	20	20
Dark blue flannel shirts		45	50	50
Drawers		25	30	30
Overcoats, blanket-lined		2 25		
Canvas :				
Caps		50		
Fatigue-coat		45	45	45
Fatigue trousers		35	35	35
Mittens		6 $\frac{1}{2}$	6 $\frac{1}{2}$	6 $\frac{1}{2}$
Mattress covers		15	12 $\frac{1}{2}$	15
Bed-sacks		25	25	25
Pillow-sacks		5	5	5
Barrack bags		13		
Conical wall-tents		7 50		
Sibley tents		5 24		
Hospital tents		8 33		
Hospital-tent flies		2 00		
Wall-tents		3 76		
Wall-tent flies		1 00		
Common tents :				
Laced corners		3 50		
Closed corners		2 80		

A detailed statement of each and every article of clothing, equipage, and materials purchased during the last fiscal year is submitted herewith, marked B. It shows the name of the depot at which purchased, name of contractor, and his place of residence, date of contract, quantities delivered, cost, and whether purchase was made by contract or otherwise.

MILITARY PRISON AT FORT LEAVENWORTH, KANS.

All the boots and shoes, corn brooms, and barrack chairs required for the Army are, under orders from the War Department, manufactured at the Military Prison at Fort Leavenworth, Kans. After ascertaining the quantities of these articles required the commandant of the prison is called upon to prepare an estimate of the supplies needed to make them. Purchases and inspections are made by the commandant of the prison, and that officer is responsible for the quality of the supplies produced there. The contracts for the materials are awarded by the Quartermaster-General upon the recommendations of the commandant.

The following articles of clothing and equipage have been manufactured at the prison for this Department during the last fiscal year:

	Pairs.
Boots, brass screwed, old pattern, to size up	6,997
Cavalry boots:	
Brass screwed	2,143
Sewed	12,604
Shoes, brass screwed, old pattern, to size up	12
Post shoes:	
Brass screwed	1
Sewed	26,778
Field shoes, sewed	93
Campaign shoes:	
Sewed	30,981
Brass screwed	5,221
Barrack chairs	3,000
Corn-brooms	27,258

The total cost of these articles has been \$239,137.51, exclusive of prison labor. The commandant of the prison reports the value of the latter to be \$28,637.50. The value of the materials used is reported to have amounted to \$231,106.77. Civilians employed in the supervision of the work were compensated to the amount of \$4,800, and the royalty paid on patented machinery used was \$3,230.74. Sale of scrap leather to the value of \$5,641.83 was made during the fiscal year, and the amount covered into the Treasury credited to miscellaneous receipts.

The commandant of the Military Prison reports the following as the cost of the articles made during the fiscal year, including the cost of prison labor:

Boots, sewed	per pair..	\$4 20
Shoes:		
Post, sewed	do	3 02
Field, sewed	do	2 43
Campaign, sewed	do	2 65
Barrack chairs	each	1 35
Corn brooms	do	23

In the annual price-list of clothing and equipage the cost of these articles is given as follows:

Boots, sewed	per pair..	\$4 21
Shoes:		
Post, sewed	do	3 04
Field, sewed	do	2 50
Campaign, sewed	do	2 67
Barrack chairs	each	1 36
Corn brooms	do	24

The apparent discrepancy arises from the fact that the cost for the fiscal year is calculated from July 1, 1885, to June 30, 1886, while the prices given in the price-list are calculated from June 1, 1885, to May 30, 1886. This difference will eventually regulate itself, as the soldier is charged the actual cost of the articles from year to year.

The commandant of the Military Prison reports the value of labor of all kinds performed for this Department during the last fiscal year at \$39,835.30, of which \$29,724 is chargeable to the account of clothing and equipage. Stores to the amount of \$273.34 have been turned over to the prison, and boots and shoes to the value of \$2,677.86. Both these items form an offset against the work done.

The following are the principal articles of materials which have entered into the manufacture of boots, shoes, and corn brooms for the Army:

Counter-leather.....	pounds..	18,841
Sole-leather	do....	227,971
Wax upper leather	square feet..	305,798
Pebble-grain leather.....	do....	111,617
Welt-leather	pounds..	23,285
Calf-skin leather, heavy.....	do....	40,855
Calf-skin leather, light.....	do....	1,597
Sheep-skin skivers.....	square feet..	23,984
Eyelets.....		1,604,500
Lacing hooks		24,000
Lacing studs.....		772,000
Broom-corn	pounds..	62,400

The accompanying statements, F to I, give detailed information regarding the transactions between the Military Prison and this Department:

CAMPAIGN HATS.

The attention of this office having been called to the fact that at some of the posts the enlisted men declined to draw the black wool campaign hats originally adopted, and preferred to draw only those of drab color, instructions have been given in the interest of an economical administration to issue the black hats until exhausted.

BLOUSES.

The propriety of placing three small buttons on the cuffs of the sleeves of the blouses of the enlisted men having been suggested, a modified sample of the standard was submitted to the honorable the Secretary of War, who, on the 10th of December last, approved of the change being made. New standards and specifications have been adopted, and issues are made in accordance therewith.

The blouses will hereafter be sewed with silk instead of cotton thread, the latter having a tendency to change color. This change will improve the appearance of this garment.

CANVAS CAPS AND MITTENS.

The quality of the canvas blanket lined caps has also been improved by substituting for the cotton jeans a scarlet wool flannel lining, thus making the cap still warmer. Under existing orders their issue was restricted to troops serving in the Departments of Dakota, the Columbia, and the Platte, but upon representation, the War Department has authorized the issue of canvas caps and mittens to all troops stationed

in extremely cold regions when the necessity for such issues is certified by Department commanders, to troops at West Point, N. Y., and to those not attached to any military department upon the approval of the head of the staff department to which they belong.

TROUSERS.

Since the introduction of the trousers of the new, darker shade, and of the improved sizes, it has been found impracticable to issue those of the lighter shade and old sizes still on hand. The disinclination to draw them is so strong that even those heretofore drawn as being required at posts are being returned to the general depots to prevent them from becoming moth eaten and otherwise damaged. There were on hand at the Saint Louis depot alone, on the 30th of June last, 18,622 pairs of these light-shade trousers, representing a capital of \$57,864.38. They are strong, durable, of good quality, and well made. They are equally as serviceable as those of the latest shade, though not of the latest style. To prevent them from becoming a total loss to the appropriation of clothing for the Army the Quartermaster-General recommended to the honorable the Secretary of War, on the 6th of February last, that this accumulation be absorbed by issues to recruits at rendezvous and depots. and that, as an inducement to draw them, the issue price be reduced about 25 per cent. The Secretary of War having approved this recommendation, the issue prices were published to the Army in Circulars Nos. 2 and 4, Headquarters Army, current series. All requisitions from recruiting officers for trousers are now filled from the older stock.

BOOTS AND SHOES.

The patterns of boots and shoes not having given entire satisfaction, a further effort has been made to improve the foot-gear of the enlisted men. Lasts known to the trade as the "Waukenphast" have been procured, and all boots and shoes are now made upon them. Three widths have been established, viz, A, B, and C, giving the men a better selection. These lasts are made wider over the instep, and, being more shapely, will, it is thought, prove satisfactory so soon as they shall have been fairly introduced. Every effort is made, however, out of a due regard to economy, to issue the boots and shoes made upon the old lasts which are still in depot. The "Campaign" shoe, adopted in lieu of the "Field" shoe, appears to meet with favor. In regard to the "Post" shoe, dissatisfaction has been expressed that the uppers are not sufficiently strong and that they break at the junction with the sole. These shoes were intended as dress shoes. The uppers are made of calf-skin, and are consequently not adapted to the rough usage of every-day wear and tear, on fatigue duty, or on the march. They are to be worn only on dress occasions. For hard usage the stronger and more durable campaign shoe should be worn. If the Post shoes are subjected to the use for which they were *not* intended, complaints that the uppers break and part from the sewing will occasionally arise. After a careful investigation of the whole subject, it was ascertained that in stitching the first lot of boots and shoes too large a needle was used and that the stitches were too close together. So soon as these defects were discovered they were remedied. A smaller needle is now used, the stitches are made wider apart, and as an additional safeguard the uppers are being lined with cotton duck. It is not likely that many complaints of the boots and shoes as now made will arise in the future.

The Quartermaster-General, on the 2d September, 1885, recommended to the honorable the Secretary of War that, where any of these shoes prove to be defective, through no fault of the wearer, by a board of survey duly appointed within thirty days after issue, such defective shoes, after action of said board, duly approved by post commanders, be turned in to the post-quartermasters, and a new pair be issued in lieu thereof.

This recommendation having been approved, relief has been extended in all cases acted upon in the manner referred to.

An improvement in the leg of the boot has also been made. The back seam, formerly sewed on the inside, is now sewed on the outside, and the seam covered by a strip of leather, thereby rendering the inside leg perfectly smooth. The pattern of the campaign shoe has also been improved by crimping the back of the upper, thereby insuring a more comfortable fit.

Pending the investigation into the cause of the breakage of the uppers from the soles, an order was given for the manufacture of a supply of brass-screwed boots and campaign shoes. They are held in reserve for issue in Arizona or at such other stations where the sewed boots and shoes, on account of the nature of the soil, may not meet the requirements of the service. Experience in the manufacture and issue of sewed boots and shoes during the last two fiscal years having shown that the tariff of sizes as well as the proportion of widths established was not correct, the demand for A lasts and small and large sizes being less than anticipated and provided for, instructions were given to the commandant of the Military Prison not to make any sizes 5, 11, and 12s, unless specially directed, and to change the proportions of the various widths in the future as follows: 20 A, 40 B, and 40 C. This will avoid an accumulation of boots and shoes and be in the interest of economy.

CANVAS BARRACK-SHOES.

To further add to the comfort of the enlisted men, the question of supplying brown canvas barrack-shoes was submitted to the honorable the Secretary of War, who, on the 16th April last, approved the recommendation of this office that they be issued to the enlisted men at cost price at the rate of one pair per annum. It is the intention to supply these shoes to such of the men as may desire them, but not to increase the money allowance of clothing in consequence of such issue. Proposals for supplying 5,000 pairs were invited, and contract has been made, deliveries under which are now progressing. Their cost is 95½ cents per pair, and should they meet with favor more will be procured, provided the appropriation for the present fiscal year will admit of the expenditure.

LEATHER GAUNTLETS.

A few complaints were received from the Army to the effect that the sewing in the leather gauntlets was not sufficiently strong, and that soon after issue the seams parted, thereby rendering the gauntlets unfit for use.

Investigation developed the fact that the action of certain chemicals used in dressing the leather affected and injured the silk used in the stitching. The manufacturer recommended the use of white linen instead of silk thread. The specifications and standards have been amended accordingly. Whenever a complaint was received the gauntlets were collected from the posts and the contractors called upon to issue good and serviceable gauntlets in lieu thereof without charge. This they have willingly done.

KNIT UNDERSHIRTS.

It having been recommended that the knit undershirts be hereafter manufactured with a ribbed hem, it was ascertained that such a change would add from 5 to 6 cents to the cost of each shirt. Whatever advantages may be derived from such a change would not be equivalent to the additional expense, involving an annual increase for the whole Army of from \$3,750 to \$4,500.

SHOULDER KNOTS FOR BAND MUSICIANS.

An improvement in the manufacture of shoulder-knots, consisting in the use of a tin frame instead of pasteboard, having been suggested, orders have been given to make use of the tin frames hereafter.

MUSIC POUCHES.

It having been represented that the inside dimensions of the music pouches heretofore procured were not sufficiently large to admit some of the music books, orders have been given to hereafter purchase and furnish them of two sizes, viz: the large to be 7 inches wide, 9 inches deep, and $1\frac{1}{2}$ inches thick; the small to be $6\frac{1}{2}$ inches wide, $5\frac{3}{8}$ inches deep, and $1\frac{1}{4}$ inches thick.

ARTILLERY GUIDONS.

The cavalry arm of the service having been provided with a new guidon, it became necessary to also adopt one for the light batteries of artillery. A design and corresponding sample having been made and submitted, the Adjutant-General of the Army advised this office on the 29th of January last that the honorable the Secretary of War approved of the same.

The guidons will be of scarlet silk, swallow-tailed, to measure 3 feet 5 inches fly and 2 feet 3 inches on the lance, and to bear in the center two crossed cannon, with number of regiment and letter of battery.

FLAG-HALYARDS.

Reports from officers upon the trial of the flag-halyards with devices for attaching the flags having been of a favorable nature, instructions were given on the 31st of August last that all halyards hereafter issued should be provided with these attachments.

WIRE-WOVEN BUNK-BOTTOMS.

The question having arisen as to whether the new bunk-bottoms are to be considered as part of the permanent equipment of a company, the Quartermaster-General, on the 15th of February last, advised chief quartermasters of divisions that the bunks, without the bottoms, would be incomplete. Troops changing stations should therefore turn them into depot with the iron bunks.

Other articles of bedding, such as mattresses, pillows, mattress covers, bed sheets and pillow-cases, are considered part of the equipment of a company.

OBSOLETE BED AND PILLOW SACKS.

With the adoption of the new articles of bedding, the bed and pillow sacks heretofore supplied have become obsolete. The former are utilized in the manufacture of covers for the new mattresses, and the latter for trouser-trimmings and pockets.

METALLIC TENT-SLIPS.

Reports having been received that the metallic tent-slips with which the new tents are provided do not prove as strong as the old wooden slips, it was ascertained upon investigation that those first manufactured were not thick enough in the metal, but that those now made are much stronger. The contractors having offered to make good any loss the Government might have sustained, they are now supplying such numbers of slips as are reported as unserviceable at posts, free of charge.

LOAN OF TENTS TO NAVY DEPARTMENT.

At the request of the Chief of the Bureau of Ordnance of the Navy Department, tents have been loaned to the Navy for use of the North Atlantic Squadron during certain naval maneuvers at Tampa Bay, Florida. They will be returned when no longer required.

CLOTHING AND TENTS FOR INDIAN PRISONERS.

Requisitions were made upon this office for a supply of clothing and tents for the Indian prisoners confined at Fort Marion, Saint Augustine, Fla., and the question of supply submitted to the honorable the Secretary of War. No decision had been rendered at the close of the fiscal year. Since then it has been decided that the articles estimated for should be supplied by the Quartermaster's Department. Orders to furnish the articles called for have been given, a statement of which, with cost, will be reported in the Annual Report for the next fiscal year.

CLOTHING AND EQUIPAGE FOR THE NAVAL EXPEDITION TO THE ISTHMUS OF PANAMA.

Settlement has been made by the Navy Department for the value of the property turned over to said Department for use of the naval expedition to the Isthmus of Panama, as specified in statement F accompanying my annual report for the last fiscal year, with the exception of \$201.14 the value of 178 rubber blankets, settlement for which, it is represented, will be made by credits upon the books of the Treasury upon the passage of a deficiency bill.

CLOTHING AND EQUIPAGE TRANSFERRED TO THE SIGNAL CORPS.

During the last fiscal year clothing and equipage to the value of \$2,821.76 has been transferred to the Signal Corps. This amount has been placed to the credit of the appropriation for clothing and equipage from the special appropriation made by Congress for said corps. The accompanying statement E gives detailed and more specific information.

CLOTHING DESTROYED BY FIRE.

The supplies of clothing and equipage for Fort Sill, Indian Territory, having been ordered from the depot at Saint Louis, Mo., packed and delivered for transportation, the officer in charge of the depot referred to, on the 27th of March last, advised this office by telegraph of the destruction by fire of the freight house. Telegraphic instructions were given duplicating the order.

Clothing supplies ordered to Fort Brown, Texas, on the 26th of Sep-

tember, 1885, were reported to have been destroyed by the burning of the steamer Bayou Sara near New Madrid, Mo., on the 5th of December last. Instructions were given to the depot quartermaster at Saint Louis, Mo., to immediately duplicate the order.

GRATUITOUS ISSUES OF CAPE-LININGS FOR OVERCOATS.

The recruits, upon their enlistments, are, as a rule, supplied with overcoats whose capes have the dark blue or infantry linings. It sometimes happens that the recruits who have been furnished with the infantry overcoats are assigned to the artillery arm of the service, when they are compelled to change the cape linings from blue to scarlet. Having once been charged with the full price of the overcoat, it would be manifestly unjust to also charge for the new lining and its insertion. The recommendation of this office to issue the new lining free of charge and allow \$1 for inserting the same was approved by the honorable the Secretary of War on the 22d of March, 1884, but not promulgated to the Army in orders. This decision, upon the recommendation of the Quartermaster-General, has recently been published to the Army in circular form.

COTTON OR LINEN CLOTHING FOR TROOPS AT SOUTHERN STATIONS.

The question of supplying cotton or linen clothing to the enlisted men at southern stations has from time to time been brought to the attention of this office. Upon reference of the subject to the Surgeon-General of the Army, that officer stated that accumulated experience teaches light woollen fabrics to be most conducive to the preservation of sound health in warm climates, that while some latitude may be allowed to the civilian in the use of his discretion in the matter of dress, the rule should be more rigidly drawn in the case of the soldier serving in warm climates, whose clothing should be light woollen or an admixture of cotton and woollen. That, should necessity compel a deviation from this rule, paragraph 2755 of the Regulations authorizes commanding officers to sanction the use on duty, in extreme southern latitudes, of white pants, to be bought out of the pay of the soldier, of the local merchant or trader.

INDIGO-DYED MATERIALS.

Referring to the subject of using a proper dye in the manufacture of woollen materials for the Army, the officer in charge of the Philadelphia depot reported that, judging from experiments made, pure indigo dye should be adhered to until a more satisfactory substitute shall have been found. This report was approved by the Quartermaster-General on the 4th of January last.

SADDLE-CLOTHS FOR OFFICERS.

At the request of the Chief of Ordnance for the Army, standard samples and specifications of the various saddle-cloths provided by General Orders No. 73, Headquarters of the Army, 1885, have been prepared at the Philadelphia depot and furnished to the Ordnance Department.

REGULATIONS AND ILLUSTRATIONS OF THE UNIFORM OF THE ARMY.

Owing to the many changes and improvements made in the uniform of the enlisted men, the book containing the regulations and illustrations published in 1880 has become practically obsolete and misleading.

The honorable the Secretary of War has authorized the publication of a new edition under the supervision of both the Inspector and Quartermaster Generals.

Many applications for precise information regarding the uniform being constantly received at this office, the regulations bearing upon the subject have been printed in pamphlet form for distribution.

Specifications of the following articles of clothing and equipage have been adopted for the Army during the last fiscal year: Crimped campaign shoes; post shoes; sky-blue kersey, heavy and fine quality; white linen trousers; gold lace; gold-lace chevrons; blanket-lining cloth; buckles; regimental colors, artillery and infantry; national colors, infantry and artillery; white-metal buttons; mattress covers; improved common tent-poles; blouses; sewed boots; ax-helves; white linen webbing; dark blue cloth, fine quality; forage caps; leather gauntlets; artillery guidons, and canvas blanket-lined caps.

A new book containing the specifications and illustrations of each article of clothing and equipage is now being prepared, and when ready will be distributed to the officers of the Department to take the place of the book of specifications which, owing to the many changes, is no longer reliable.

Standard samples of the following articles of clothing, equipage, and materials have been adopted and distributed to general purchasing and manufacturing depots of the Quartermaster's Department during the last fiscal year to be used for reference in the purchase, manufacture, and inspection of supplies for the Army, viz: White-metal buttons; mattress covers; blouses; ax-helves; white linen webbing; dark blue cloth, fine quality; black Italian cloth; black silesia; post shoes; campaign shoes; sewed boots; regimental colors, artillery; leather gauntlets; canvas caps, blanket lined; white linen trousers; blanket-lining cloth; buckles, and sky-blue kersey, heavy and fine quality.

CLERICAL WORK.

During the last fiscal year the clerical force of the clothing-supply branch of this office consisted of four clerks and one copyist. The work has been kept up to date. Three thousand one hundred and fourteen letters were received, and 5,705 letters have been written.

The following-described papers, from which further and more detailed information can be obtained, accompany this report, viz:

A.—Statement showing articles of clothing, equipage, and material on hand at the issuing depots of the Quartermaster's Department June 30, 1885; the quantities purchased manufactured, received from posts and depots, taken up, sold, transferred to general depots, expended, issued to the Army, and the quantities remaining in depot June 30, 1886.

B.—Detailed statement of articles of clothing, equipage, and materials purchased by the Quartermaster's Department and paid for from the appropriation for clothing and equipage during the fiscal year ending June 30, 1886.

C.—Statement of amounts received and remitted by the Quartermaster's Department on account of clothing and equipage during the fiscal year ending June 30, 1886.

D.—Statement showing remittances on account of clothing and equipage during the fiscal year ending June 30, 1886.

E.—Statement showing articles of clothing and equipage transferred to the Signal Corps of the Army during the fiscal year ending June 30, 1886; also money value of the property.

F.—Statement showing articles of clothing and equipage manufactured at the Military Prison, Fort Leavenworth, Kans., for the Quartermaster's Department during the fiscal year ending June 30, 1886; also cost of materials, labor, &c.

G.—Statement showing values of labor performed for the Quartermaster's Department by the Military Prison at Fort Leavenworth, Kans., during the fiscal year ending June 30, 1886.

H.—Statement showing articles of clothing and equipage issued to the Military Prison at Fort Leavenworth, Kans., during the fiscal year ending June 30, 1886, and money value of the property.

I.—Statement showing articles of quartermaster stores issued to the Military Prison at Fort Leavenworth, Kans., during the fiscal year ending June 30, 1886, and money value of the property.

K.—Statement showing average prices at which the various articles of clothing and equipage are charged to the Army of the United States from July 1, 1886, to June 30, 1887.

L.—Statement showing amount of money realized at the general depots of the Quartermaster's Department and the Military Prison at Fort Leavenworth, Kans., from sales of clothing, equipage, materials, cuttings, and scrap leather at auction, &c., during the fiscal year ending June 30, 1886; also expenses connected with said sales.

Respectfully submitted.

JOHN F. RODGERS,

Captain and Military Storekeeper, U. S. A.

The QUARTERMASTER-GENERAL, U. S. ARMY.

A.—Statement showing articles of clothing and equipage and material on hand at the issuing depots of the Quartermaster's Department June 30, 1885, the quantities purchased, manufactured, received from posts and depots, taken up, sold, transferred to general depots, expended, issued to the Army, and the quantities remaining in depot June 30, 1886.

H. Ex. 1, pt. 2—33

Articles.	On hand June 30, 1885.	Pur- chased.	Manu- factured.	Received from general depots.	Received from posts and distrib- uting depots.	Gained.	Total received.	Sold.	Trans- ferred to general depots.	Ex- pended.	Issued to the Army.	Total issued.	Remain- ing on hand June 30, 1886.
Helmets:													
Untrimmed.....number..	14,600	2,973		7,454	58		25,085	34	3,564		6,602	10,200	14,885
Cork.....do.....	3,226	9,790		6,909	368		20,293	36	5,890	46	6,806	12,778	7,515
Helmet hair plumes.....do.....	9,250	2,371		2,638	34		14,293	1	1,008		2,985	3,894	10,399
Helmet cords and bands.....do.....	9,098	2,229		2,590	75		13,092	3	1,115		2,715	3,833	10,159
Helmet top bands.....do.....	40,998	14,000		5,600	365		60,863	4	4,850		5,855	10,709	50,154
Helmet plume sockets.....do.....	18,488	2,500		3,000			23,988	26	1,000		3,330	4,356	19,632
Helmet plume sockets, top pieces.....do.....					37		37						37
Helmet spikes.....do.....	23,853	10,000		3,500	15		37,368	17	2,000	102	3,318	5,437	31,931
Helmet eagles.....do.....	49,142	6,022		5,750	50	15	60,979	55	4,600		5,960	10,615	50,864
Helmet scrolls and rings.....pairs.....do.....	29,117	18,000		1,000	48		48,165	4	500		3,292	3,796	44,369
Helmet side buttons.....do.....	80,733	32,000		8,511	191		121,435	38	5,902	48	12,074	18,062	103,373
Helmet numbers.....number.....do.....	69,259	64,484		4,000	1,269		139,012	29	4,000		9,546	13,575	125,437
Helmet devices.....do.....	4,054	1,910		445	84		6,493	1	435		654	1,090	5,403
Helmet chin straps.....do.....	27	150				20	197	27			170	197	
Chapeaus.....do.....		2					2			2		2	
Forage caps.....do.....	37,860	21,625		32,740	109		82,534	102	19,180	56	43,299	62,637	29,897
Forage-cap covers.....do.....	171			62	21		254	192				192	62
Fur caps.....do.....	933			294	12		1,239	15	249		601	865	374
Canvas caps, blanket-lined.....do.....	3,488		12,035	5,729			21,252	8	7,857		11,593	19,458	1,794
Dress caps.....do.....					10		10	10				10	
Campaign hats.....do.....	17,337	17,489		21,785	823		57,434	1,941	18,653	70	20,818	41,482	15,952
Campaign hat, cords, and tassels.....do.....	37,808	72		80	468		38,428	837	80	14	2,045	2,976	85,452
Forage caps, crossed cannon.....do.....	11,033	1,000		200	186		12,419	3	200		887	1,090	11,329
Forage caps, crossed sabers.....do.....	21,353	2,000					23,353	38			3,200	3,238	20,145
Forage caps, crossed rifles.....do.....	27,173	3,500			770		31,443	37		10	5,051	5,098	26,345
Forage caps, castles.....do.....	350	500					850	2			602	604	246
Forage caps, shells and flames.....do.....	810				8	12	830	20			164	184	646
Forage caps, crescents.....do.....	422				1		423	2			53	55	368
Forage caps, wreaths.....do.....	1,729	1		294	9		2,033	17	294	1	292	604	1,429
Forage caps, bugles.....do.....	34,042				484		34,526	5,338			359	5,697	28,829
Forage caps, numbers.....do.....	134,963	62,500		16,531	9,184		223,181	659	14,000	27	25,168	39,854	183,327
Forage caps, lyres.....do.....	252	1,000		138			1,391		38		1,334	1,372	10
Pompons.....do.....					6		6	6				6	
Uniform dress-coat castles.....do.....	375				166		541	73				73	468
Letters, brass.....do.....	120,283	72,600		3,870	2,696		199,419	60		28	14,622	14,710	184,709

A.—Statement showing articles of clothing and equipage and material on hand at the issuing depots of the Quartermaster's Department, &c.—Continued.

Articles.	On hand June 30, 1885.	Pur- chased.	Manu- factured.	Received from general depots.	Received from posts and distrib- uting depots.	Gained.	Total received.	Sold.	Trans- ferred to general depots.	Ex- pended.	Issued to the Army.	Total issued.	Remain- ing on hand June 30, 1886.
Overcoats:													
Kersey, made.....number..	10, 676	.....	3, 830	3, 730	730	30	18, 996	200	2, 457	27	6, 596	9, 280	9, 716
Kersey, unmade.....do.....	553	.....	2, 121	1, 836	18	.....	4, 528	.....	1, 636	.....	2, 072	3, 708	820
Buffalo.....do.....	3, 453	.....	.....	1, 060	101	.....	4, 614	100	1, 000	.....	993	2, 093	2, 521
Canvas, blanket-lined.....do.....	723	.....	803	200	80	.....	1, 806	186	200	.....	83	469	1, 437
capas lining.....do.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	1	1	.....
Uniform dress coats:													
Musicians', foot and mounted, made, number.....	820	.....	250	244	940	.....	2, 254	119	343	3	680	1, 145	1, 109
Musicians', foot and mounted, un- made.....number.....	.....	.....	22	.....	8	.....	30	.....	.....	.....	22	22	8
Privates', foot and mounted, made, number.....	13, 173	.....	1, 630	4, 390	9, 551	.....	28, 744	1, 315	4, 682	65	7, 635	13, 697	15, 047
Privates', foot and mounted, unmade, number.....	833	.....	3, 077	2, 705	174	.....	6, 789	195	2, 090	.....	3, 140	5, 425	1, 364
Crescents.....number.....	446	.....	.....	.....	6	.....	452	43	.....	.....	8	51	401
Shells and flames.....do.....	913	10	.....	.....	49	24	996	60	.....	.....	.....	60	936
Blouses:													
Lined, made.....do.....	29, 371	.....	19, 153	9, 314	879	6	58, 723	7, 926	5, 621	9	28, 199	41, 755	16, 968
Unlined, made.....do.....	748	.....	.....	8	332	.....	1, 088	665	.....	.....	93	758	330
Unmade.....do.....	2, 219	.....	19, 893	11, 146	58	.....	33, 316	100	18, 595	2, 016	17, 125	32, 836	480
Officers'.....do.....	.....	1	.....	.....	.....	.....	1	.....	.....	1	.....	1	.....
Canvas, plain and plaited, made, number.....	44, 196	.....	14, 997	15, 250	20	.....	74, 463	76	15, 050	1	24, 036	39, 163	35, 300
Canvas, plain and plaited, unmade, number.....	.....	.....	.....	.....	.....	24	24	24	.....	.....	.....	24	.....
Sack coats.....number.....	8	.....	.....	.....	.....	.....	8	.....	.....	.....	.....	.....	8
Stable frocks.....do.....	9, 096	.....	2, 281	1, 500	70	.....	12, 947	41	1, 500	.....	3, 698	5, 239	7, 708
Overalls:													
Cavalry and artillery.....pairs..	9, 282	.....	4, 010	3, 819	57	.....	17, 168	3	3, 600	.....	5, 205	8, 808	8, 360
Engineers'.....do.....	267	.....	.....	284	.....	.....	551	.....	.....	.....	22	22	529
Trousers:													
Mounted, made.....do.....	15, 780	.....	14, 450	3, 541	1, 996	5, 632	41, 399	72	2, 802	.....	12, 432	15, 306	26, 093
Foot made.....do.....	81, 008	.....	23, 513	2, 487	2, 464	.....	59, 472	180	2, 300	34	20, 489	23, 003	36, 469
Mounted, unmade.....do.....	15, 467	.....	6, 809	7, 775	763	.....	30, 814	147	9, 681	.....	14, 695	24, 523	6, 291
Foot, unmade.....do.....	9, 026	.....	16, 651	11, 868	1, 894	.....	38, 939	348	11, 900	.....	23, 112	35, 360	3, 579
Canvas, fatigue, made.....do.....	42, 644	.....	18, 904	16, 750	9	10	73, 317	137	16, 650	4	24, 304	41, 095	82, 222
Canvas, fatigue, unmade.....do.....	.....	.....	.....	.....	.....	10	10	10	.....	.....	.....	10	.....
Linen, made.....do.....	2, 632	.....	108	465	.....	.....	3, 205	21	465	.....	1, 295	1, 772	1, 438
Linen, unmade.....do.....	.....	.....	103	.....	.....	.....	103	.....	.....	.....	91	91	12

Suspenders.....do.....	32,831	10,990	7,540		60,361	142	6,880		12,507	19,529	40,832
Shirts:											
Flannel, gray.....number.....	26,979			1,633	28,612	13,125		2,353	15,478	13,134	
Flannel, dark blue, made.....do.....	86,508		19,569	23,501	129,855	2,518	23,500	65	44,497	70,580	59,275
Flannel, dark blue, unmade.....do.....			2,388	2,326	4,743	100	2,226		835	3,161	1,582
Knit, under.....do.....	68,700	39,000		53,346	161,389	157	44,636	33	62,508	107,334	54,055
Drawers:											
Canton flannel.....pairs.....	72,232		93,067	50,292	214,699	259	59,767	20	75,114	135,160	79,339
Suspendory.....do.....	5				5						5
Stockings:											
Woolen.....do.....	58,095	170,000		113,490	342,209	336	112,399	57	150,053	262,845	79,364
Cotton.....do.....	48,752	183,251		135,377	368,120	768	114,573	111	142,673	258,125	109,995
Felt.....do.....	72				72						72
Gloves:											
White Berlin, rights and lefts, number.....	134,344	300,218	25,946	1,727	462,335	11,588	186,946		94,555	293,089	179,146
White Berlin.....pairs.....	1,501		118,389		119,890	108	2,700	40	107,692	110,540	9,350
Mittens:											
Woolen.....do.....	2,548	18,197	8,224	706	29,675	84	8,287		12,514	20,885	8,790
Fur.....do.....	1,968	49			2,017				1,791		226
Canvas.....do.....	2,859		11,925	11,764	26,648		12,264	1	11,947	24,212	2,436
Gauntlets:											
Fur.....do.....	8,483	5,490	6,799	32	20,804	2	9,017	3	7,771	16,793	4,011
Leather.....do.....	7,323	13,082	10,000	1,486	31,891	68	10,000	35	13,293	23,396	8,495
Canvas.....do.....	79		13		92				92	92	
Boots:											
Brass-screwed.....do.....	7,396		9,140	9,438	1,371	6	6,633		10,403	18,313	10,219
Sewed.....do.....	9,238		12,613	12,010	462	1	11,908	1	15,609	27,561	8,226
Felt.....do.....	3				3						3
Shoes:											
Brass-screwed.....do.....	19,240		13	3,273	23,691	2,069	1,869	11	6,736	10,685	13,006
Post.....do.....	25,797		26,688	22,931	78,082	244	22,942	82	40,029	63,297	14,785
Field.....do.....	20,934		98	6,738	30,693	39	4,990	3	19,788	24,820	5,873
Campaign.....do.....	3,021		36,204	39,518	81,085	17	35,859	7	13,924	49,807	31,278
Overshoes:											
Buffalo.....do.....	2,180		4		2,184	11			921	932	1,252
Arctic.....do.....	13,642	2,000	4,700	239	20,581	29	4,700		6,570	11,299	
Gaiters, buck arctic.....do.....	1				1				1	1	9,282
Snow excluders.....do.....	1				1						1
Protectors, foot and leg.....do.....	2				2						2
Blankets:											
Woolen.....number.....	21,435	33,787	26,053	1	81,276	142	32,500	998	16,017	49,657	31,619
Rubber.....do.....	34,913			7,997	42,910	1,427			2,671	4,098	38,812
Ponchos, rubber.....do.....	27,029			300	27,329	1,047			2,112	3,159	24,170
Chevrons:											
Gold lace, all kinds.....pairs.....	1,145		29,727	2,574	33,663	173	1,818		24,745	26,736	6,927
Cloth, non-commissioned staff and first sergeants'.....pairs.....	2,094		195	4,305	7,327	1,988	1,465		1,424	4,877	2,450
Cloth, regimental quartermaster-sergeants'.....pairs.....	35				35						
Cloth, regimental color-sergeants', pairs.....	29		78		107	16	40			14	21
									2	58	49

A.—Statement showing articles of clothing and equipage and material on hand at the issuing depots of the Quartermaster's Department, &c.—Continued.

Articles.	On hand June 30, 1885.	Pur- chased.	Manu- factured.	Received from general depots.	Received from posts and distrib- uting depots.	Gained.	Total received.	Sold.	Trans- ferred to general depots.	Ex- pended.	Issued to the Army.	Total issued.	Remain- ing on hand June 30, 1886.
Chevrons—continued.													
Cloth, sergeants'.....pairs..	2,957	.....	5,778	3,898	849	.....	13,482	2,154	3,432	9	4,682	10,277	3,205
Cloth, corporals'.....do.....	2,908	.....	6,128	3,762	898	.....	13,696	1,967	3,832	8	3,786	9,593	4,103
Cloth, pioneers and farriers' do.....	369	.....	.....	234	50	.....	653	51	86	.....	124	261	392
Cloth, service, peace.....do.....	19,238	.....	.....	.....	13,449	.....	37,687	29,082	.....	.....	.....	28,982	8,705
Cloth service, war.....do.....	12,715	.....	.....	.....	13,526	.....	26,241	20,311	.....	.....	.....	20,311	5,930
Cloth, sample.....do.....	52	.....	.....	.....	.....	.....	52	.....	52	.....	.....	52	.....
Cloth, campaign.....do.....	13,628	.....	.....	.....	2,507	200	16,435	13,907	.....	.....	.....	13,967	2,468
Brassards.....number.....	.....	.....	117	.....	.....	.....	117	.....	.....	.....	100	100	17
Aiguillettes, with shoulder-knots.do.....	189	602	.....	98	.....	.....	889	.....	98	.....	775	873	16
Signal Corps devices.....do.....	2	.....	746	646	2	.....	1,396	646	.....	.....	650	1,296	100
Trouser stripes.													
Non-commissioned staff.....pairs..	271	.....	736	450	7	.....	1,464	1	400	2	866	1,269	195
Sergeants.....do.....	1,477	.....	8,648	7,681	3,110	.....	20,616	412	4,574	1,492	11,126	17,604	3,312
Corporals.....do.....	1,736	.....	14,163	11,115	2,187	1	29,202	382	8,047	1,148	10,038	25,615	3,587
Officers.....do.....	.....	.....	478	.....	.....	.....	478	464	.....	.....	14	478	.....
Facings for uniform dress coats.....sets..	1,696	.....	13,735	8,781	5,860	4,656	34,678	5,408	8,010	.....	12,821	26,239	8,439
Blouse trimmings.....do.....	.....	.....	5	.....	.....	.....	5	5	.....	.....	.....	5	.....
Trouser trimmings.....do.....	.....	.....	76	.....	.....	.....	76	16	.....	.....	60	76	.....
Barrack bags.....number.....	4,767	.....	12,633	7,925	500	.....	25,825	31	7,029	9	10,034	17,103	8,722
Bunks:													
Iron.....do.....	2,098	2	.....	592	771	.....	3,463	236	592	2	1,018	1,648	1,615
Slats.....do.....	2,552	.....	.....	299	.....	13	2,864	.....	.....	.....	876	876	1,988
Wire-woven bunk bottoms.....do.....	7,787	3,206	.....	2,900	11	.....	13,898	3	3	.....	13,809	13,615	83
Iron bedsteads with wire-woven bunk bottoms and mosquito-bar frames, number.....	724	350	.....	.....	1	.....	1,075	.....	1	.....	511	512	563
Mattresses.....do.....	716	20,359	.....	3,052	11	.....	24,138	3	3,052	.....	17,704	20,759	3,379
Mattress covers.....do.....	8,190	18,114	24,634	4,432	20	.....	55,396	.....	4,432	.....	36,618	41,050	14,346
Pillows.....do.....	744	20,358	.....	3,501	5	.....	24,608	1	3,001	.....	18,252	21,254	8,354
Pillow-cases.....do.....	2,431	42,007	.....	.....	11	.....	44,449	1	7,002	.....	33,636	40,639	8,810
Pillow-sacks.....do.....	31,767	.....	.....	27,116	15,985	.....	74,868	231	30,764	880	6,425	38,300	36,668
Bed-sacks.....do.....	10,803	.....	.....	6,315	5,357	2,000	23,975	805	5,377	9,061	512	15,755	8,220
Bed-sheets.....do.....	4,801	64,000	.....	.....	39	.....	77,340	19	4,960	.....	71,001	75,980	1,860
Mosquito bars.....do.....	7,242	1,880	.....	3,000	888	.....	13,005	1,332	3,000	.....	5,515	9,847	3,158
Mosquito head-nets.....do.....	.....	180	.....	.....	.....	.....	180	.....	.....	.....	.....	180	.....
Pots, iron.....do.....	895	.....	.....	.....	155	.....	1,050	4	.....	.....	49	53	997
Kettles, camp.....do.....	15,419	.....	.....	.....	1,500	72	16,991	23	1,500	.....	2,340	3,869	13,122
Pans, mess.....do.....	76,485	.....	.....	.....	.....	.....	76,485	335	.....	.....	1,545	1,880	74,605
Axes.....do.....	5,850	3,733	.....	5,100	13	.....	14,696	21	5,100	.....	6,081	11,152	3,544

Ax-helves.....do.....	3,867	15,072	10,814	54	29,753	19	8,300	17	16,158	24,494	5,250
Ax-slings.....do.....	921			54	975			5	46	51	924
Hatchets.....do.....	34,241			56	34,297	419			1,302	1,721	32,576
Hatchet-helves.....do.....	16,716	1,500		41	18,257	30		75	3,512	3,617	14,640
Hatchet-slings.....do.....	842			89	931			5	30	35	896
Spades.....do.....	18,262	18	27	9	17,344	16			1,091	1,107	16,237
Spade-helves.....do.....	100				100				24	24	76
Spade-slings.....do.....	62			74	136			4	33	37	99
Shovels:											
Short handle.....do.....	3,050	2,800	1,811		7,661	79	1,070	44	3,621	4,814	2,847
Long-handle.....do.....	1,534		1,818		3,360	6	1,150	15	1,771	2,942	418
Handles.....do.....	175	36			212				152	152	60
Pickaxes.....do.....	12,329		317		12,646	624	810		1,467	2,401	10,245
Pickax-helves.....do.....	4,381	504	2,465	226	7,576	10	2,465	140	3,221	5,836	1,740
Pickax-slings.....do.....	32			48	80			4	12	16	64
Drums, complete.....do.....	323	100	24	34	481	6	24		60	90	391
Drum-heads:											
Batter.....do.....	1,217			683	1,900	54			322	376	1,524
Snare.....do.....	2,145			581	2,776	30			232	262	2,464
Drum-slings.....do.....	1,462			82	1,544	969			34	1,093	541
Drum-rods.....do.....	189	36		29	254		29		181	210	44
Drum-hooks.....pairs.....	80				80						80
Drum-sticks.....do.....	4,804			83	4,887	76			26	102	4,785
Drum-stick carriages.....number.....	2,776			55	2,831				11	11	2,820
Drum-cords.....do.....	1,291			239	1,530	798	124		10	932	598
Drum-snares.....do.....	3,832			198	4,030	17			58	75	3,955
Drum-snare fixtures.....do.....		2			2				2	2	
Drum-cases.....do.....	675			150	843	369			3	372	471
Drum flesh-hoops.....do.....		4			4				4	4	
Trumpets.....do.....	588	651	450	2	1,691	25	435	3	430	893	798
Trumpets, extra mouth pieces.....do.....	885			11	1,376	1,231				1,231	145
Trumpet-crooks.....do.....	224		17	42	407	171	17	3	155	346	61
Bagles, with extra mouth-piece.....do.....	113			6	119	12				12	107
Cords and tassels, trumpet and bugle,											
number.....do.....	2,429	100	75	32	2,636	80	25		385	490	2,144
Fifes.....number.....do.....	3,384			139	3,523	891			79	970	2,553
Music-pouches.....do.....		700	66	33	799		75		705	780	19
Books:											
Company clothing account.....do.....	4,042			50	4,092	782				782	3,310
Company descriptive.....do.....	4,843			61	4,504	889				889	3,615
Company letter and index.....do.....	968	1,600	846	9	3,423	27	357	12	1,076	1,472	1,951
Company morning report.....do.....	832			59	891	824				824	67
Company order.....do.....	1,958		289	18	1,665	412	100	5	385	902	763
Post letter and index.....do.....	1,253		426	49	1,731	138	298	2	453	891	840
Post order.....do.....	745		169	69	983	112	100	3	145	360	623
Regimental descriptive.....do.....	280			14	294	11				11	283
Regimental general order.....do.....	83			3	99			12	3	15	84
Regimental index.....do.....	196				208	111				111	97
Regimental letter and index.....do.....	545		12	11	608	34		1		183	425
Regimental orders.....do.....	284			3	307	148		1	35	184	123
Consolidated morning report.....do.....	11				11	11				11	
Inspection.....do.....	29				29						29

A.—Statement showing articles of clothing and equipage and material on hand at the issuing depots of the Quartermaster's Department, &c.—Continued.

Articles.	On hand June 30, 1885.	Pur- chased.	Mann- ufactured.	Received from general depots.	Received from posts and distrib- uting depots.	Gained.	Total received.	Sold.	Trans- ferred to general depots.	Ex- pended.	Issued to the Army.	Total issued.	Remain- ing on hand June 30, 1886.
Books—continued.													
Letters received and index.....do.....		1					1				1	1	
Brigade letter.....do.....	3						8						3
Tents:													
Conical wall.....do.....	284		226	302	1		813	5	340	1	353	699	114
Sibley.....do.....	159		3	40	3		205			1	67	68	137
Hospital.....do.....	228		110	111	19	7	475	11	84	1	161	257	218
Wall.....do.....	318		758	611	11		1,696	66	510	2	714	1,292	404
Common.....do.....	662			464	69		1,195	9			603	612	583
Common with wall.....do.....	446		1,741	1,100	18		3,305	7	1,568	5	1,176	2,756	549
Bell.....do.....	3				1		4						4
Shelter, halves.....do.....	212,668			29,650	89	8,300	250,707	56,000	29,510	97,022	11,272	193,804	56,903
Pyramid.....do.....	4						4						4
French wall.....do.....	2						2						2
French common.....do.....	2						2						2
Pattern.....do.....	3						3						3
Pattern, with tripods and poles, number.....do.....	1						1						1
Marqueé.....do.....	2						2						2
Conical wall, model.....do.....	1						1						1
Felt.....do.....		3			3		6		3			3	3
Flies, hospital.....do.....	208		141	191	26	12	578	14	121	1	178	314	264
Flies, wall.....do.....	379		721	621	21		1,742	42	540	2	758	1,342	400
Flies, wall, French.....do.....	2						2						2
Flies, pattern.....do.....	2						2						2
Poles, Sibley.....do.....	620	500		280	8		1,408	1	275	7	378	661	747
Poles, shelter, upright.....do.....	21,111	250			202		21,563	985		324	3,246	4,555	17,008
Poles, hospital, upright.....do.....	1,691			40	39	14	1,784	4	60	43	189	296	1,488
Poles, hospital, ridge.....do.....	1,508			20	19	7	1,554	2	30	11	94	137	1,417
Poles, wall, ridge.....do.....	1,059	2,800		350	24		8,733	13	350	6	518	887	2,846
Poles, wall, upright.....do.....	2,415	4,600		700	28		7,743	26	700	2	1,057	1,785	5,958
Poles, common, upright.....do.....	4,832	9,000		400	428		14,660	6	400	488	1,704	2,598	12,062
Poles, common, ridge.....do.....	2,128	6,000		700	120		8,948	11	700	53	998	1,762	7,186
Poles, bell.....sets.....do.....	4				2		6						6
Poles, pyramid.....do.....	4						4						4
Pins, all kinds.....number.....do.....	148,105	246,500					4						4
Guyes.....do.....	690			90,775	2,684	10,190	498,254	1,567	83,430	11,810	125,878	222,685	275,569
Straps.....do.....	173	500					690						690
Ropes.....sets.....do.....	504						673				14	14	659
							504	504				504	

Slips.....number..	18,202	54,900	2,000	10,725	85,827	10,725	2,000	40,186	744	53,655	32,172
Rings.....do....	8,209	450			8,059			229	4	233	8,426
Rings, Sibley.....do....	20				20				7	7	13
Stoves, Sibley.....do....	523	75	50	1	649		50		262	312	337
Stove-pipe joints, Sibley.....do....	3,240	3,500	2,200	2	8,942		2,200		3,455	5,655	3,287
Chains, Sibley.....do....	2,800				2,800			229	32	261	2,539
Tripods, Sibley.....do....	1,602		232	8	1,932	1	225	2	318	546	1,386
Pole-sockets.....do....	68				68				19	19	49
Buttons.....do....				120	120				120	120	
Flags:											
Post.....do....	212	150	131	28	521	6	83	15	136	240	281
Garrison.....do....	195		1	82	278			9	10	19	259
Storm and recruiting.....do....	424	400	246	58	1,128	7	104	18	331	520	608
Recruiting.....do....	60				60						60
Designating.....do....	370			148	518						518
Post and field hospital.....do....	121			7	128						128
General hospital.....do....	61			2	63	1				1	62
Signal.....do....			16		17						16
Colors:											
National.....do....	93		9	6	108	9	6	86	5	106	2
Regimental.....do....	215	14	14	35	278	64	4	189	18	275	3
Camp.....do....	53	254	116	51	486	3	120		96	219	267
Guidons.....do....	261	102	12	181	608	96	9	442	102	649	19
Guidon-cases.....do....	60	6	12	19	97	2	2	12	8	24	73
Guidons, ambulance.....do....	11		7	7	25		7	7		14	11
Guidon-pikes.....do....	15	132	2		149			86	2	88	61
Standards.....do....	89	1	2	104	346	80	3	261	1	345	1
Standard pikes.....do....		1			1						1
Markers.....do....	4	133			137				128	128	9
General guides.....do....	2	67			69				64	64	5
Streamers.....do....			15		15						15
Color cords and tassels.....do....	625				625	475				475	150
Color-cases.....do....	42	20	11	1	74		11	11	27	49	25
Color-slings.....do....	2				2						2
Color-belts.....do....	2				2						2
Color belts and slings.....do....	53			8	61	5			11	16	45
Color-staffs.....do....	2,079		478		2,557	220	453	267		940	1,617
Flagstuffs, hospital and guidon.....do....	25				25	25				25	
Halliards:											
Garrison and post.....do....	252	315	60	10	637	23	57		134	214	423
Storm and recruiting.....do....	2,184		144	10	2,338		20		38	58	2,280
Devices.....do....		350			350				350	350	
Stencils, complete, in box.....sets..	113		100		213			3	63	66	147
Stencil-plates.....number..	600				600		100		11	11	489
Company marking-stamps.....do....	45	41			86			3	81	84	2
Brooms, corn.....do....	9,827	3,500	25,993	27,572	3,006	160					
Brushes, scrubbing.....do....	5,177	16,424		12,024							
Alphabets:											
One-inch.....sets..	24				24				5	5	19
One-half-inch.....do....	16				16				6	6	10

A.—Statement showing articles of clothing and equipage and material on hand at the issuing depots of the Quartermaster's Department, &c.—Continued.

Articles.	On hand June 30, 1885.	Pur- chased.	Manu- factured.	Received from general depots.	Received from posts and distrib- uting depots.	Gained.	Total received.	Sold.	Trans- ferred to general depots.	Ex- pended.	Issued to the Army.	Total issued.	Remain- ing on hand June 30, 1886.
Numbers:													
One-inch.....sets..	27						27				11	11	16
Three-fourth-inch.....do..	26						26				4	4	22
One-half-inch.....do..	26						26				4	4	22
Barrack chairs.....number..	1,306		3,503	1,004	44		5,857	1	1,456	1	3,380	4,838	1,019
Card-holders.....do..	7,846	3,000		3,000	258		13,804	10	3,000		5,309	8,819	5,485
Shoe-files.....do..	139				40		179	90			2	92	87
Washstands, camp.....do..	2						2						2
Camp-stools.....do..		100					100				100	100	
Acid, oxalic.....pounds..		20				25	45			28		28	17
Alpaca.....yards..	62						62						62
Ammonia.....gallons..				1			1			1		1	
Awls:													
Assorted.....dozen..	46		72				118						118
Sewing.....number..		4,608				868	5,476			2,857		2,857	2,619
Pricking.....do..		100					100						100
Awl-hafts, assorted.....do..	136	240					376						376
Awl-blocks.....do..		1					1			1		1	
Baling-presses.....do..	17						17						17
Band-saws.....do..	1						1						1
Baskets.....do..	2						2						2
Baskets, wash.....do..				6			6			6		6	
Beeswax.....pounds..	58	693				13	764			551		551	213
Bleaching-tubs.....number..				1			1			1		1	
Blades, cloth-cutting machine.....number..	30						30						30
Bluing tubs.....do..				1			1			1		1	
Boards, pattern.....pounds..	202				300		502			502		502	
Boiler.....number..				1			1			1		1	
Bolts, chair.....do..			33				33				33	33	
Books:													
Text.....do..	20				6		26		2		4	6	20
Cutters' clothing account.....do..		2					2			2		2	
Scientific.....do..	5						5						5
Boot-cripping forms.....pairs..	944	500	800				2,244						2,244
Boot-seam rubbers.....number..	2						2						2
Boot-trees, automatic, with table.....do..	2	5					7						7
Boxes, patent.....do..	9						9			9		9	
Braid, worsted.....yards..	4,469	20,724		2,458	169	1,500	29,820	504	500	13,866	2,205	16,665	12,655
Brass checks.....number..				2,000			2,000			2,000		2,000	
Bristles, sewing.....pounds..		15					15			16		16	1

Broom corn.....do.....		62,400				62,400			62,400		62,400	
Broom handles.....number.....		26,000				26,000			26,000		26,000	
Broom twine.....pounds.....		520				520			520		520	
Broom wire.....do.....		1,040				1,040			1,040		1,040	
Brushes, button.....number.....		2				2						2
Cloth.....do.....		12				12						12
Ink, flat.....do.....		108			100	208			77		77	131
Ink, round.....do.....		5			200	397			150		150	247
Bristle, round.....do.....		1				5						5
Stencil.....do.....		24				42				26	26	16
Buckles:												
Gilt.....do.....	22,147	107,256		24,000		405	153,868		24,000	72,234		101,234
Shoe, automatic.....do.....	62,630					476	63,106			6		63,100
Buckram.....yards.....	22						22					22
Bunting.....do.....	50						50					50
Burlaps.....do.....		5,648					5,648			4,806		4,806
Button-gauge.....number.....	1						1					1
Buttons:												
Bone.....pounds.....	717					717	717					717
Coat, large.....number.....	110,160	286,128		295,344		691,632		151,209	350,610	26,640	528,480	163,152
Rubber, large.....gross.....	90	1,113		512		1,715		925	516	13	1,448	297
Rubber, small.....number.....	96,624	168,336		230,256		495,216		170,928	220,608		391,536	103,680
Shirt and fly.....do.....	242,208	1,217,088		648,432		2,107,728		648,432	909,360		1,557,792	540,936
Suspenders.....do.....	70,848	891,152		183,456		1,245,456		183,456	768,384		951,840	293,616
Coat and vest.....do.....	3,665,520	249,129		69,696		3,984,336	347,904	153,936	233,280	16,272	751,392	3,232,944
Tent.....do.....	1,330					1,330	1,330				1,330	
Metal.....pounds.....	553					553	553				553	
Brown lasting.....gross.....	38	95				128			86		86	42
Cases, glass and rosewood.....number.....	3					3						3
Cast-offs.....do.....		24				24			24		24	
Channel cement.....gallons.....	3	507				57			47		47	10
Chalk.....boxes.....	44					44			36		36	8
Clamps.....number.....	139					139						139
Clamps, band, knife machine.....do.....	24					24						24
Cloth:												
Beams.....do.....	1					1						1
Baling.....yards.....	9,377	25,233				34,610			11,754		11,754	22,850
Dark-blue uniform, 6-4.....do.....	10,134	18,608		15,733	176	44,616	314	12,620	11,597	10,718	35,249	9,397
Dark-blue uniform, fine quality, yards.....do.....	4					4						4
Facing.....yards.....	1,210	7,170		1,643	189	10,471	162		2,506	27	3,682	6,789
Italian.....do.....	4,047	305				4,352	10	987	2,563	1	2,574	1,778
Blanket.....do.....	5,370	4				5,374			2,496		2,496	2,878
Holders.....number.....	4					4						4
Weights.....do.....	6					6						6
Clothing tickets.....do.....	10,000	326,500				326,500			270,000		270,000	66,500
Cord.....yards.....		5,710				5,710		305	3,173	10	3,488	2,222
Loop.....do.....				305		305				305	305	
Tent.....feet.....	265,352					265,352		5,000	140,450		145,450	119,902
Worsted.....yards.....	55,008			203	200	55,501	50,136				50,136	5,365
Cotton.....pounds.....		1,586		101		1,687		101	1,244		1,345	342

A.—Statement showing articles of clothing and equipage and material on hand at the issuing depots of the Quartermaster's Department, &c.—Continued.

Articles.	On hand June 30, 1885.	Pur- chased.	Manu- factured.	Received from general depots.	Received from posts and distrib- uting depots.	Gained.	Total received.	Sold.	Trans- ferred to general depots.	Ex- pended.	Issued to the Army.	Total issued.	Remain- ing on hand June 30, 1886.
Crépe.....yards.....		26					26				26	26	
Crimping breaks.....number.....	8	4					12						12
Crimp screws.....do.....	5	1,000					1,005						1,005
Crispin hammers.....do.....	109	13					121						121
Creasers or strip sets.....do.....	19	24					43						43
Cutters.....do.....	11						11						11
Cuttings, all kinds.....pounds.....	72,538					202,051	274,589	273,617				273,617	972
Dies, assorted.....number.....	174	241					415						415
Doeskin, sky blue.....yards.....	142	303					445	251		1	9	261	184
Dressing, shoe.....gallons.....	81	216		6		168	471		6	221		227	244
Drilling, 3-4.....yards.....	3,894	25,018		4,020		12,568	49,500		4,020	30,675	1	34,696	10,804
Duck:													
Cotton.....do.....	38,615	230,914		24,184			293,713	285		171,946	258	172,489	121,224
Blue.....do.....	577						577						577
Brown.....do.....	29	140,225		22,832	1,623	2,085	172,294		46,516	59,390	3,708	109,614	62,680
Dry rooms.....number.....				2			2					2	
Edge planes with pressers.....do.....	35	252					287						287
Edgeshaves.....do.....	12						12						12
Emery powder.....pounds.....		30				1	31			24		24	7
Engine, horizontal.....number.....				1			1			1		1	
Epsom salts.....pounds.....		40					40			38		88	2
Eyes.....number.....	135,695	61,056		7,200			203,951			122,305	7,200	129,505	74,446
Eyelets.....do.....		1,655,000					1,655,000			1,604,500		1,604,500	50,500
Eyelet-machine.....do.....	1	1					2						2
Eyelet-hook machine.....do.....	1						1						1
Feather dusters.....do.....		4					4						4
Flannels:													
Canton.....yards.....	58,013	210,091		9,001		31,772	303,877	302	9,022	234,318	10,188	253,330	55,047
Cape lining.....do.....	686	10,642			75		11,403	5	90	8,971	432	9,438	1,965
Dark-blue blouse, 6-4.....do.....	7,188	118,159		85,370	177	5,892	216,786	10,106	70,638	78,513	12,203	171,460	45,326
Dark-blue blouse, 3-4.....do.....	58						58						
Gray shirting.....do.....	18,072	54,963		12,831	61	400	86,327	331	11,832	59,292	4,431	75,886	10,441
Dark-blue shirting, 6-4.....do.....	44,253	48,662		20,030	92	300	113,337	110	34,200	25,458	410	60,178	53,159
Red.....do.....	9						9						
Crimson lining.....do.....								9					
Flatirons.....number.....	5						5						5
Figures, steel.....sets.....	3	1					4						4
Piles for heel-stitching machine.....number.....	4	3					7						7
Galvanized awning frame.....do.....		1					1			1		1	

Glue.....	pounds..	201			35	236			236		236		
Goose-irons.....	number..	5		2		7							7
Goose-iron stands.....	do.....	2				2							2
Gronnquets, brass.....	do.....		95,464	4,000		99,464		4,000	76,558		80,558	18,906	
Gum camphor.....	pounds..			40		40			40		40		
Gum tragacanth.....	pounds..		100		64	164			114		114		50
Hammers (Hammond).....	number..		12			12							12
Heel-burnishers.....	do.....		11			11							11
Heel-shaves.....	do.....	29	204			233							233
Hooks.....	do.....	169,295	66,056	7,200		242,551			155,097	7,200	162,297	80,254	
Illustrations of French uniforms, plates.....		32				32							32
Ink:													
Burnishing.....	gallons..		200		52	252			221		221		31
Indelible.....	pints.....	8	48	4		60			9	24	33		27
Do.....	bottles..		1,012			1,012			3	16	19		993
Ironing tables and stands.....	number..			12		12			12		12		
Iron:													
Hoop.....	pounds..	1,917	4,000	1,000		6,917			3,817		3,817	3,100	
Round.....	do.....		6,000		400	6,400			6,100		6,100	300	
Forepart.....	number..	6				6						6	
Nuts.....	pounds..		375		25	400			379		379	21	
Shank.....	number..	3				3						3	
Tank.....	do.....			1		1			1		1		
Jacks:													
Heeling.....	do.....					3							3
Shoe, crispin.....	do.....	31				31							31
Japanned slides.....	do.....		1,512			1,512			803		803	709	
Jeans, corset.....	yards..	3,352	25,870	100	3,867	33,189		100	30,749	175	30,924	2,265	
Kersey, sky blue 6-4.....	do.....	28,423	132,902	13,995	858	176,505	745	11,257	125,803	13,659	151,464	25,041	
Knives:													
For Amazon skiving machine No.....			12			12			12		12		
Assorted.....	do.....	206	516			722			7		7	715	
Band.....	do.....	6				6						6	
For Gallagher's shears.....	sets.....		2			2			2		2		
Knife-blocks.....	number..		4			4			4		4		
Knife-guards.....	do.....		4			4			4		4		
Lacing-cord.....	feet.....	4,200		5,000		9,200			9,200		9,200		
Lacing-hooks.....	number..		24,000			24,000			24,000		24,000		
Lacing-studs.....	do.....		1,110,000			1,110,000			772,000		772,000	338,000	
Laces, shoe.....	pairs....	1,738	75,024			76,762			62,725		62,725	14,037	
Lace, gold.....	yards..	36	26,643			26,679			25,862		25,862	817	
Lamps:													
Microscope.....	number..	1				1							1
Kit.....	do.....		36			36						36	
Lampblack.....	pounds..		10	20	3	33						5	
Lasts.....	pairs....	1,922	2,474			4,396			28		28	4,396	
Iron.....	number..	9				9						9	
Calf boot.....	pairs....	1				1			1		1	1	
Lathe, complete.....	number..	1				1						1	
Laundry stoves.....	do.....			2		2			2		2		
Lay figures.....	do.....	33		29		62							62

A.—Statement showing articles of clothing and equipage and material on hand at the issuing depots of the Quartermaster's Department, &c.—Continued.

Articles.	On hand June 30, 1885.	Pur- chased.	Manu- factured.	Received from general depots.	Received from posts and distrib- uting depots.	Gained.	Total received.	Sold.	Trans- ferred to general depots.	Ex- pended.	Issued to the Army.	Total issued.	Remain- ing on hand June 30, 1886.
Leather:													
Counter.....pounds..	705	21,249				2,231	24,185			18,841		18,841	5,344
Russet.....feet..	47	311					358			70		80	278
Scrap.....pounds..			64,950	25,211			90,161	88,708		1,453		90,161	
Sole.....do..	23,154	229,999					253,153			227,971		227,971	25,182
Wax upper.....square feet..	41,025	311,249				716	352,999			305,798		305,798	47,192
Pebble grain.....do..	9,902	119,999				3,353	133,254			111,617		111,617	21,637
Welt.....pounds..	10,343	22,000					32,343			23,285		23,285	9,058
Calf, light.....do..	2,750						2,750			1,597		1,597	1,153
Calf, heavy.....do..	4,416	53,495				483	58,393			40,855		40,855	17,538
Linen:													
Brown.....yards..	275						275						275
White.....do..	702						702			314		314	388
Lines:													
Eye.....number..			1,200				1,200				1,200	1,200	
Guy.....do..			116				116				116	116	
Line:													
Tent.....pounds..	16,662	16,253					32,915			10,792	145	10,937	21,973
Gilling.....do..	416	2,865		56			3,337		56	1,912		1,968	1,369
Lumber:													
Hickory.....feet..		25,300				1,400	26,700			25,300		25,300	1,400
Pine.....do..	16,940	118,000					134,940			112,460		112,460	22,480
Poplar.....do..	1,640	1,300				6	2,946			1,946		1,946	1,000
Machines:													
McKay channeler.....number..	1						1						1
McKay channeler, extra parts for.....do..		73					73			73		73	2
Chase, skiving.....do..	1	1					2						
Band knife.....do..	2	1					2						2
Burnishing.....do..	1						1						1
Cloth-testing.....do..	6			1			6						6
Pricking, extra part for.....do..		8					8			8		8	
Counter-skiving.....do..	2						2						2
Cloth-sponging.....do..	1						1						1
Cloth-cutting.....do..	1						1						1
Heel-aling.....do..	1						1						1
McK. & B. heeler, extra parts for, number.....		8					8			8		8	
Leveling.....number..	1	1					2						2
Measuring.....do..	4						4						4

Rolling.....do.....	1					1					1
Sand-paper.....do.....	1					1					1
G. & McK. stitching, extra parts for, number.....		239				239			239		239
Sewing.....number.....	18	10		1		29					29
Sewing, extra parts for.....do.....		284				284			284		284
Beveler, extra parts for.....do.....		26				26			26		26
Shank.....do.....	1					1					1
Feather-edge.....do.....	1					1					1
Side-welt.....do.....	1					1					1
Welt, extra parts for.....do.....		126				126					126
Skiving.....do.....	1					1					1
Tripp's power skiving.....do.....		1				1					1
Sole-cutting.....do.....	2					2					2
Sole-molding.....do.....	1					1					1
Sole-molding, extra parts for do.....		4				4			4		4
Splitting.....do.....	3					3					3
Starching.....do.....				1		1			1		1
Strap-hole cutting.....do.....	1					1					1
Stripping.....do.....	1					1					1
Steel die.....do.....	1					1					1
Turning.....do.....	2					2					2
Tying.....do.....	4					4					4
National wax-thread.....do.....	6	2				8					8
National wax-thread, extra parts for.....number.....		114				114					114
Button-fastening.....do.....	2					2					2
Washing.....do.....				1		1			1		1
Magnifying glasses.....do.....	3					3					3
Measuring table.....do.....				1		1					1
Marking paste.....boxes.....	11					11					11
Microscopes.....number.....	3					3					3
Microscopes, pocket.....do.....	1					1					1
Muslin:											
Unbleached.....yards.....	61,625			5,046	2,700	69,389	1	25,305	18,862	44,168	25,221
Brown.....do.....				25,305		25,305			18,732	18,732	6,573
Nails:											
Cut.....pounds.....		3,560				3,560			2,900		660
American.....do.....	1,287	4,600				8,831			4,493		4,338
Swede.....do.....	5,197	9,691				14,888			8,075		6,813
Channel.....do.....		900			6	906			693		213
Wrought.....do.....		3,150				3,150			2,100		1,050
Nail blocks.....number.....		1				1			1		1
Napmeter.....do.....	2			1		3					3
Needles:											
Assorted.....papers.....	4,402	500,000		42,300	403	547,105		57,500	179,820	20,025	257,345
Broom.....number.....		24				24			21		21
Goodyear & McKays.....do.....		8,000				8,000			6,300		1,700
Wax thread.....dozen.....		2,510			1,112	3,622			1,054		2,568
Wheelor and Wilson sewing-machine.....number.....	650	5,000				5,650			3,630		2,020
Sail.....do.....	126					126				12	114

A.—Statement showing articles of clothing and equipage and material on hand at the issuing depots of the Quartermaster's Department, &c.—Continued.

Articles.	On hand June 30, 1885.	Pur- chased.	Manu- factured.	Received from general depots.	Received from posts and distrib- uting depots.	Gained.	Total received.	Sold.	Trans- ferred to general depots.	Ex- pended.	Issued to the Army.	Total issued.	Remain- ing on hand June 30, 1886.
Palms.....number..	22	12					34						34
Nippers, wire.....do..	2	12					14						14
Oil-cups.....do.....	42			6			48						48
Oil:													
Sperm.....gallons..		20					20			16		16	4
Neat's-foot.....do..	48	240					288			285		285	3
Mineral.....pounds..	36	400					436			269		269	167
Oil-stones.....number..		72					72						22
Pads.....do.....		7					7			7		7	
Padding.....yards..	2,468	48,636		15,460		13,669	80,233	1	15,461	55,483		70,945	9,288
Paper:													
Pattern.....pounds..		97					465			385		385	80
Petroleum.....do..	4,556	44,101		11,130	200		59,987	18	8,069	36,327	4,637	49,051	10,936
Wrapping.....reams..		600		2			602			280	3	283	319
Do.....sheets..	57,336	4,700				145	62,181			52,795	4,440	57,235	4,946
Sand, molded.....rolls..	9	100				21	130			72		72	58
Do.....sheets..		2,400					2,400			1,950		1,950	444
Do.....quires..		90				6	96			92		92	4
Tissue.....reams..		15					15			8		8	7
Pegfloats, assorted.....number..	3						3						3
Pincers, assorted.....do..	240	72					312						312
Pine.....gross.....	14						26			14		14	
Pliers.....number..	26						26						26
Punches, assorted.....do..	14	4					18						18
Rawhide:													
Seats and thongs.....do..		3,500					3,500			3,500		3,500	
Thongs.....sets..		9				9	18				9		9
Mallets.....number..	83						83						83
Rings, galvanized iron.....pounds..	991	1,097					2,088			1,344	2	1,346	742
Rinsing tubs.....number..				8			8			3		3	
Rivets, shoe-buckle.....gross..	784						784			1		1	783
Rope:													
Baling.....pounds..		3,060					3,060			1,805		1,805	1,255
Cotton.....do..	722	2,311					3,033			1,965	20	1,985	1,048
Manila.....do..	12,478						12,478			136		136	12,342
Wire.....feet.....		100					100			100		100	
Road.....pounds..		800					300			60		60	240
Rulers.....number..	1						1						1
Rungs, chair.....do..			320				320				320		
Rye-flour.....pounds..	300	3,000					3,300			2,755		2,755	545

Sad-irons.....	number..	9		24		33		24		24	9
Sand-hones.....	do.....	18				18		18		18	
Saws for band-knife machine.....	do.....	1				1					1
Scales, silk.....	do.....	1				1					2
Scales and weights, chemists.....	do.....	2				2					
Scales:											
Silk-trip.....	do.....	1				1					1
Testing.....	do.....	1				1					1
Scissors, pairs.....	do.....	1				1					1
Scratch-bones.....	do.....	12				12					12
Screws.....	gross.....	177	340			517		814		514	203
Screw-wire.....	pounds.....	148	2,000			2,148		1,702		1,702	446
Seals:											
No. 1.....	number.....	1				1					1
C. and E.....	do.....	2				2					2
Sets hook and eyelet.....	number.....	4				4					4
Settling and receiving tank.....	do.....			3		3		3		3	
Sewing cuffs.....	do.....	9				9					9
Sewing presses.....	do.....	4				4					4
Shears.....	pairs.....	19	12			31	2			2	29
Sheepskin skivers.....	square feet.....	4,444	25,000			29,444		23,984		23,984	5,460
Shoe-trees.....	sets.....	8				17					17
Shoe-trees, extra backs for automatic.....	number.....										
Silesia.....	yards.....	1,433	35,024	12,545	4,000	53,002	6	12,545	32,684	45,235	7,767
Silk:											
Measure.....	number.....	2				2					2
Sewing.....	spools.....	4,115	4,459	384	225	9,183	118	384	3,557	4,063	5,120
do.....	ounces.....	3,782	980			4,712			2,029	2,029	2,683
do.....	yards.....	766,894	1,812,000			2,078,894	20		766,894	766,411	1,812,483
Twist.....	do.....	38,207				264,810			38,207	38,207	226,003
do.....	ounces.....	615	2,720	175		4,770			2,140	2,815	2,455
Chevron.....	pounds.....	6	25			39			12	12	27
Tester.....	number.....	2				2					2
Slick bones.....	do.....	1				1					1
Size blocks.....	do.....	9				9					9
Slats, chair.....	do.....			120		120			120	120	
Soaking tubs.....	do.....			1		1			1	1	
Sponge.....	pounds.....		25	2		27			26	26	1
Soap-tanks.....	number.....			2		2			2	2	
Squares.....	do.....	4				4					4
Stamps:											
Steel.....	do.....	6	8			9					9
Rubber.....	do.....	10	10	11		31					31
Stay-binding.....	dozen.....	1,655				1,055	682	157	10	849	206
Sticks:											
Pants.....	number.....	1				1					1
Assorted.....	do.....	20	24			44					44
Yard.....	do.....	9				9					9
Stoves.....	do.....	2				2					2
Stoves, gas.....	do.....	2				2					2

A.—Statement showing articles of clothing and equipage and material on hand at the issuing depots of the Quartermaster's Department, &c.—Continued.

Articles.	On hand June 30, 1885.	Pur- chased.	Manu- factured.	Received from general depots.	Received from posts and distrib- uting depots.	Gained.	Total received.	Sold.	Trans- ferred to general depots.	Ex- pended.	Issued to the Army.	Total issued.	Remain- ing on hand June 30, 1886.
Tables:													
Cutters.....number..	28						28						28
Automatic boot-tree.....do....	12						12						12
Tacks:													
Lasting, steel.....gross.....		404				74	478			255		255	223
Lasting, Swede.....pounds.....		3,100				847	3,947			2,998		2,998	949
Tinned.....papers.....		650					650			55		55	595
Tags, shipping.....number.....		13,100				75	13,175			12,075		12,075	1,100
Tape.....yards.....	55,408	123,006		52,536			231,940		45,000	143,246		188,246	43,694
Tape measures.....number.....	2			1			3						3
Tailors' crayons.....boxes.....	342	174					516			189		189	327
Thread:													
Machine.....pounds.....	886	3,620		300			4,806			3,358		3,358	1,448
Cotton.....spools.....	73,954	88,116		3,835		7,842	173,747		46,020	48,770		94,790	78,957
Linen.....pounds.....	975	4,771		228		300	6,274		757	4,014	1	4,772	1,502
Linen.....yards.....	9,312						9,312			9,312		9,312	
D. B. and W. B.....pounds.....	1,211			457			1,668	281	228		4	860	808
Silk.....do.....	15	500				7	522			247		247	275
Shoe (band).....do.....	32	1,200					1,232			526		526	706
Turn-table pivots.....number.....		36					36			36		36	
Turpentine.....gallons.....		10		30		3	43			34		34	9
Twine:													
Cotton.....pounds.....	6,253	1,753					8,011			1,723	6	1,729	6,282
Heavy.....do.....		750					750			20		20	730
Blocking.....do.....		700					700			488		488	212
Flax.....do.....	50	346				35	431			359		359	72
Hemp.....do.....	112	300					412			254		254	158
Wadding.....sheets.....	26,639			1,680		400	28,739			11,294		11,294	17,445
Washers.....number.....				3			3			3		3	
Wax:													
Sewing.....balls.....		3,000					3,000			2,659		2,659	341
Liquid.....gallons.....		60				1	61			52		52	9
Machine.....pounds.....	223	2,700				57	2,980			1,162		1,162	1,818
Sealing.....do.....	50	800		50		1	401			290		290	111
Webbing:													
Linen.....yards.....	13,375	56,777		11,411			81,563		18,023	36,851	9,247	64,121	17,442
Cotton.....do.....		504					504				504	504	
Silk.....yards.....		3					3			3		3	
Welt trimmers.....number.....	45	60					105						105

Wire:											
Spring steel.	pounds	5					5		5	5	
Spring brass.	do.	5					5		5	5	
Wringers.	number		4				4		4	4	
Zinc	pounds	191					191		191	191	
do	sheets	10					10		10	10	
Saddle cloths.	number	4					4		4	4	
Paint brushes.	do.	6					6			6	
Sealing pots.	do.	2					2			2	
Patterns	sets	3					3			3	
Baling needles	number	36					36			36	
Paint.	pounds	2					2		2	2	
White lead	do	50					50		50	50	
Varnish.	gallons	4					4		4	4	
Cutter's schedules	number	1,000					1,000		250	250	750
Cutter's morning reports.	do.	2,000					2,000		425	425	1,575
Packing boxes	do.	1,110					1,110		1,110	1,110	
Chrome green.	pounds	10					10		10	10	
Cylinder grease	do.	30					30		10	10	20
Ochre.	do.	60					60		30	30	30
Flour.	do.	200					200		200	200	
Soap.	do.	60					60		35	35	25

B.—Detailed statement of articles of clothing, equipage, and materials, purchased by the
during the fiscal year

PHILADELPHIA, PA.

Articles.	Purchased under contract.			
	Contractor.	Date of contract.	Quantity delivered.	Cost.
Cloth, D. B. coat.....	San Francisco Pioneer Woolen Factory, San Francisco.	June 5, 1885	10,000 yds.	\$19,750 00
Cloth, D. B. coat, fine.....	Lewis Bros. & Co., Philadelphia.	July 30, 1885	6,014 $\frac{1}{2}$ yds.	12,780 54
Cloth, blanket.....	Horstmann Bros. & Co., Philadelphia.	May 28, 1885	1,629 $\frac{1}{2}$ yds.	4,195 64
Do.....				
Do.....				
Do.....				
Cloth, Italian.....				
Kersey, S. B., heavy.....	Lewis Bros. & Co., Philadelphia.	May 29, 1885	85,000 yds.	106,037 50
Kersey, S. B., light.....	Francis H. Smith, New York.	June 2, 1885	3,075 yds.	3,505 50
Kersey, S. B., fine.....	do.	Aug. 20, 1885	10,000 yds.	18,200 00
Flannel, gray blouse.....	B. Y. Pipepy & Co., New York.	May 29, 1885	12,521 $\frac{1}{2}$ yds.	2,680 87
Flannel, canton.....	do.	do.	39,985 $\frac{1}{2}$ yds.	8,290 80
Flannel, D. B. blouse, cloth finished.	Pioneer Woolen Factory, San Francisco.	June 5, 1885	20,000 yds.	20,900 00
Flannel, D. B. fine.....	do.	July 30, 1885	8,000 yds.	10,760 00
Do.....	The John Shilleto Co., Cincinnati.	Dec. 30, 1885	3,000 yds.	4,185 00
Flannel, D. B. shirting.....	Pioneer Woolen Factory, San Francisco.	June 5, 1885	13,200 yds.	10,560 00
Flannel, cape lining.....	B. Y. Pipepy & Co., New York.	May 29, 1885	5,676 $\frac{1}{2}$ yds.	4,626 65
Do.....				
Doeskin, S. B.....				
Do.....				
Black silks.....	Harrington & Goodman, Philadelphia.	June 25, 1885	19,978 $\frac{1}{2}$ yds.	1,598 26
Do.....				
Padding, canvas.....	Chas. Conrad & Son, Philadelphia.	May 25, 1885	4,063 yds.	416 45
Padding, black.....	Harrington & Goodman, Philadelphia.	June 12, 1885	32,024 $\frac{1}{2}$ yds.	2,241 73
Jeans, corset.....	Chas. Conrad & Son, Philadelphia.	May 25, 1885	18,818 yds.	1,164 36
Linings.....				
Cotton drilling.....	John Welsh, Philadelphia.	June 2, 1885	5,018 $\frac{1}{2}$ yds.	801 12
Cotton duck, 12-oz.....	Jas. R. Michael, New York.	May 23, 1885	63,574 yds.	9,466 16
Cotton duck, 10-oz.....	do.	do.	10,500 yds.	1,306 20
Cotton duck, 8-oz.....	do.	do.	9,825 yds.	1,046 09
Cotton duck, brown.....	John Welsh, Philadelphia.	June 2, 1885	10,125 yds.	1,139 06
Gloves, white Berlin.....	T. A. Ashburner, Philadelphia.	June 8, 1885	100,120 pra.	11,884 24
Blankets, woolen.....	Pioneer Woolen Factory, San Francisco.	June 5, 1885	15,000	51,000 00
Blankets for lining canvas caps.	Dean Woolen Company, Newark, Del.	June 18, 1885	854 $\frac{1}{2}$	2,093 01
Forage caps.....	Hirschberg & Co., New York.	May 26, 1885	15,000	7,500 00
Stockings, woolen.....	A. H. and C. B. Alling, Birmingham, Conn.	June 11, 1885	120,000 pra.	28,275 00
Do.....	do.	Dec. 26, 1885	25,000 pra.	6,625 00
Stockings, cotton.....	A. B. Karelson, New York.	May 25, 1885	75,000 pra.	7,275 00
Do.....	do.	Sept. 21, 1885	60,000 pra.	5,640 00
Do.....	do.	Dec. 30, 1885	50,000 pra.	4,625 00
Suspenders.....	Thomas G. Hood, Philadelphia.	June 3, 1885	19,990 pra.	3,385 80
Undershirts, knit.....	Joseph S. Whiteside, New York.	May 25, 1885	25,000	11,843 75
Helmets, cork.....	Charles Lehman, New York.	June 9, 1885	5,000	6,250 00
Do.....	J. H. McKenney & Co., New York.	Dec. 26, 1885	4,000	4,400 00
Helmets, untrimmed.....	Raymond & Whitlock, New York.	May 23, 1885	1,000	1,250 00
Do.....	do.	Dec. 26, 1885	5,000	5,900 00
Hats, drab campaign.....	William H. Hurlburt, New York.	May 27, 1885	5,000	6,875 00
Do.....	J. S. Isaacs, New York.	Dec. 26, 1885	5,000	7,075 00
Gauntlets, muskrat.....	Keck & Boies, Johnstown, N. Y.	May 23, 1885	5,000 pra.	7,600 00
Mittens, woolen.....	Thomas G. Hood, Philadelphia.	June 3, 1885	15,000 pra.	3,975 00

Quartermaster's Department, and paid from the appropriation for clothing and equipage, ending June 30, 1886.

PHILADELPHIA, PA.

Purchased in open market.				Total.	
From whom purchased.	Date of purchase.	Quantity purchased.	Cost.	Quantity.	Cost.
				10,000 yds.	\$19,750 00
Horstmann Bros. & Co., Philadelphia.	Dec. 15, 1885	203 $\frac{1}{2}$ yds.	\$661 37	6,217 $\frac{1}{2}$ yds.	13,441 91
B. Y. Pipey & Co., New York	Sept. 24, 1885	4 yds.	9 12	4 yds.	9 12
John Wanamaker, Philadelphia.	Aug. 3, 1885	35 yds.	82 60		
Horstmann Bros. & Co., Philadelphia.	Aug. 4, 1885	2,955 $\frac{1}{2}$ yds.	7,811 05		
do	do	1,008 $\frac{1}{2}$ yds.	2,568 96		
B. Y. Pipey & Co., New York	Oct. 29, 1885	1,200 yds.	3,036 00		
do	do	1,800 yds.	4,608 00	8,628 $\frac{1}{2}$ yds.	22,302 25
Harrington & Goodman, Philadelphia.	Apr. 21, 1886	5 yds.	4 00	5 yds.	4 00
Conshohocken Woolen Mills, Conshohocken, Pa.	Dec. 26, 1885	170 $\frac{1}{2}$ yds.	272 80	85,170 $\frac{1}{2}$ yds.	106,310 30
				3,075 yds.	3,595 50
				10,000 yds.	18,200 00
				12,521 $\frac{1}{2}$ yds.	2,690 87
				39,985 $\frac{1}{2}$ yds.	3,290 80
				20,000 yds.	20,900 00
				11,000 yds.	14,945 00
				13,200 yds.	10,560 00
John Wanamaker, Philadelphia.	Mar. 22, 1886	3 yds.	2 55		
do	Apr. 8, 1886	42 $\frac{1}{2}$ yds.	72 83	5,722 $\frac{1}{2}$ yds.	4,701 23
J. Rodman Hicks, Philadelphia.	Dec. 15, 1885	144 $\frac{1}{2}$ yds.	511 64		
B. Y. Pipey & Co., New York	do	158 $\frac{1}{2}$ yds.	549 48	302 $\frac{1}{2}$ yds.	1,061 12
Thos. G. Hood, Philadelphia	Jan. 9, 1886	5,030 $\frac{1}{2}$ yds.	408 71		
Alberger, Stoer & Co., Philadelphia.	Apr. 16, 1886	5 yds.	58	25,013 $\frac{1}{2}$ yds.	2,007 55
Hood, Bonbright & Co., Philadelphia.	Oct. 29, 1885	5,000 yds.	512 00	9,063 yds.	928 45
				32,024 $\frac{1}{2}$ yds.	2,241 73
Wm. E. Goodman, Philadelphia.	Jan. 9, 1886	5,011 $\frac{1}{2}$ yds.	315 08	23,859 $\frac{1}{2}$ yds.	1,479 44
John Wanamaker, Philadelphia.	Sept. 30, 1885	10 yds.	8 45	10 yds.	8 45
do	Jan. 9, 1886	10,000 yds.	570 00	15,018 $\frac{1}{2}$ yds.	871 12
				63,574 yds.	9,466 16
				10,500 yds.	1,306 20
				9,925 yds.	1,046 09
				10,125 yds.	1,139 06
				100,120 prs.	11,884 24
				15,000	51,000 00
Pitkin & Thomas, Philadelphia.	Jan. 10, 1886	301 blankets, 1,365 lbs.	681 68	1,155 $\frac{1}{2}$	2,774 69
				15,000	7,500 00
				145,000 prs.	34,900 00
				185,000 prs.	17,540 00
				19,990 prs.	3,385 80
				25,000	11,843 75
				9,000	10,650 00
				6,000	7,150 00
J. S. Isaacs, New York	Aug. 1, 1885	5,004	6,330 06		
do	Dec. 10, 1885	239	302 33	15,243	19,582 39
				5,000 prs.	7,600 00
				15,000 prs.	3,975 00

B.—Detailed statement of articles of clothing, equipage, and materials

PHILADELPHIA, PA.—Continued.

Articles.	Purchased under contract.			
	Contractor.	Date of contract.	Quantity delivered.	Cost.
Overshoes, arctic.....	Rich, Levicks, Son & Co., Philadelphia.	May 27, 1885	2,000 pra.	\$5,400 00
Flags, post.....	Robert C. Toy, Philadelphia...	May 25, 1885	150	1,605 00
Flags, storm and recruiting.	Cornelius S. Livingston, Lowell, Mass.	May 23, 1885	400	1,180 00
Guidons, cavalry.....				
Do.....				
Do.....				
Do.....				
Do.....				
Do.....				
Guidons, artillery.....				
Do.....				
Guidon pikes.....				
Do.....				
Do.....				
Colors, regimental, artillery.				
Cavalry standards.....				
Cavalry-standards pikes.....				
Silken colors, markers.....				
Do.....				
Silken colors, general guides.				
Do.....				
Camp colors.....				
Do.....				
Do.....				
Camp colors, without staffs.				
Color cases.....				
Do.....				
Guidon cases.....				
Axes.....				
Do.....				
Ax-helves.....				
Do.....				
Do.....				
Hatchet-helves.....				
Pickax-helves.....				
Scrubbing-brushes.....	Rowland A. Robbins, New York.	May 27, 1885	3,000	400 20
Buckles, gilt.....	James R. Michael, New York..	May 23, 1885	500 gro.	520 00
Do.....				
Buckles, white metal.....				
Shovels, short handles.....				
Do.....				
Do.....				
Shovel-handles, long.....				
Shovel-handles, short.....				
Spades, long handles.....				
Buttons, suspender.....	James R. Michael, New York..	May 23, 1885	4,320 gro.	284 40
Do.....				
Buttons, bone.....				
Buttons, rubber, large...	Horstmann Bros. & Co., Philadelphia.	May 22, 1885	15,120	52 50
Do.....	Harrington & Goodman, Philadelphia.	June 12, 1885	197 gro.	476 84
Buttons, rubber, small...	Horstmann Bros. & Co., Philadelphia.	May 22, 1885	4,608	9 92
Do.....	James R. Michael, New York..	May 23, 1885	537 gro.	241 65
Buttons, rubber, shirt.....				
Do.....				
Buttons, fly.....	James R. Michael, New York..	May 23, 1885	4,444 gro.	251 82
Do.....				

purchased by the Quartermaster's Department, &c.—Continued.

PHILADELPHIA, PA.—Continued.

Purchased in open market.				Total.	
From whom purchased.	Date of purchase.	Quantity purchased.	Cost.	Quantity.	Cost.
				2, 000 prs.	\$5,400 00
				150	1,605 00
				400	1,180 00
Horstmann Bros. & Co., Philadelphia.	Nov. 6, 1885	3	\$20 25		
do	Dec. 18, 1885	6	40 50		
do	Dec. 31, 1885	4	27 00		
do	Jan. 6, 1886	1	6 75		
do	Feb. 23, 1886	5	33 75		
do	June 7, 1886	31	209 25	50	337 50
C. A. Hart & Co., Philadelphia.	Mar. 30, 1886	4	47 48		
do	June 7, 1886	8	94 96	12	142 44
J. H. Wilson, Philadelphia.	Nov. 6, 1885	9	13 77		
do	Dec. 21, 1885	20	30 60		
do	June 7, 1886	41	62 73	70	107 10
Horstmann Bros. & Co., Philadelphia.	Apr. 16, 1886	1	150 00	1	150 00
do	Feb. 17, 1886	1	50 00	1	50 00
J. H. Wilson, Philadelphia.	June 19, 1886	1	2 35	1	2 35
C. A. Hart & Co., Philadelphia.	Mar. 1, 1886	4	32 72		
do	Mar. 30, 1886	4	32 72	8	65 44
do	Mar. 1, 1886	2	14 40		
do	Mar. 30, 1886	2	14 40	4	28 80
J. H. Wilson, Philadelphia.	Aug. 1, 1885	46	63 02		
do	Aug. 3, 1885	8	10 96		
do	Aug. 17, 1885	50	68 50	104	142 48
do	Oct. 26, 1885	150	91 50	150	91 50
do	July 20, 1885	6	1 62		
do	Aug. 17, 1885	14	3 78	20	5 40
do	July 20, 1885	6	84	6	84
Paul J. Field, Philadelphia.	May 16, 1885	300	153 00		
North Wayne Tool Company, Hallowell, Me.	....do....	666	352 98	966	505 98
James Woolworth, Sandusky, Ohio.	Aug. 3, 1885	3, 024	393 12		
do	Oct. 6, 1885	5, 000	675 00		
do	May 16, 1885	1, 008	125 16	9, 032	1,193 28
do	....do....	1, 500	30 00	1, 500	30 00
Paul J. Field, Philadelphia, Pa.	Sept. 1, 1885	504	72 45	504	72 45
				3, 000	403 20
James R. Michael, New York.	July 31, 1885	10, 008	72 28		
do	Oct. 2, 1885	20, 448	142 00	102, 450	734 28
Thomas G. Hood, Philadelphia.	Aug. 17, 1885	100	1 88	100	1 88
Charles J. Field, Philadelphia.	May 16, 1885	500	150 00		
do	Aug. 1, 1885	1, 000	300 00		
Maxwell Rowland & Co., Philadelphia.	May 13, 1886	800	256 00	2, 300	706 00
Charles J. Field, Philadelphia.	Mar. 1, 1886	12	1 32	12	1 32
do	....do....	24	3 00	24	3 00
Paul J. Field, Philadelphia.	Sept. 30, 1885	18	7 02	18	7 02
Horstmann Bros. & Co., Philadelphia.	Sept. 19, 1885	576 gro.	37 44		
James R. Michael, New York.	Oct. 24, 1885	1, 000 gro.	63 33	5, 896 gro.	385 17
Hood, Bonbright & Co., Philadelphia.	Oct. 29, 1886	50 gro.	4 97	50 gro.	4 97
				147, 168	529 34
				81, 936	251 57
Hood, Bonbright & Co., Philadelphia.	Sept. 30, 1885	500 gro.	217 00		
Thos. G. Hood, Philadelphia.	Jan. 9, 1886	100 gro.	42 37	600 gro.	259 37
Horstmann Bros. & Co., Philadelphia.	Sept. 19, 1885	1, 008 gro.	57 12		
James R. Michael, New York.	Oct. 24, 1885	1, 500 gro.	82 50	6, 952 gro.	391 44

B.—Detailed statement of articles of clothing, equipage, and materials

PHILADELPHIA, PA.—Continued.

Articles.	Purchased under contract.			
	Contractor.	Date of contract.	Quantity delivered.	Cost.
Buttons, fly, bone.....				
Buttons for Buffalo overcoats.				
Buttons, lasting, brown ..	Harrington & Goodman, Philadelphia.	June 12, 1885	60 gro.	\$16 80
Buttons, coat, large	Horstmann Bros. & Co., Philadelphia.	May 22, 1885	955 gro.	1,490 35
Buttons, coat, small	do	do	703 gro.	551 85
Tape, white.....	T. A. Ashburner, Philadelphia.	June 8, 1885	22,680 yds.	72 45
Do	Horstmann Bros. & Co., Philadelphia.	May 22, 1885	22,943 yds.	73 29
Tape, brown	do	do	28,750 yds.	91 84
Silk, black, sewing.....	Leonard O. Smith, Philadelphia.	June 9, 1885	300 ozs.	135 00
Silk, white, sewing				
Do				
Do				
Silk, yellow, sewing				
Do				
Do				
Silk, colored, sewing.....	Harrington & Goodman, Philadelphia.	June 12, 1885	250 spools	5 62
Do	James R. Michael, New York.	May 23, 1885	731 spools	45 69
Silk, twist	Leonard O. Smith, Philadelphia.	June 9, 1885	1,760 ozs.	774 40
Do				
Do				
Silk, chevron, black	Leonard O. Smith, Philadelphia.	June 9, 1885	500 ozs.	225 00
Silk, chevron, white				
Cotton, white				
Cotton, brown	Horstmann Bros. & Co., Philadelphia.	May 22, 1885	3,200 spools	108 00
Cotton, black	do	do	38,704 spools	1,306 26
Thread, black, No. 35	Laing & Maginnis, Philadelphia.	May 28, 1885	2,000 lbs.	3,000 00
Thread, black, No. 70				
Thread, D. B.				
Thread, D. B., lap, No. 35 ..				
Helmet, plume sockets...	Horstmann Bros. & Co., Philadelphia.	May 22, 1885	2,500	410 00
Helmet, side buttons.....	do	do	32,000	134 40
Helmet hair plumes	H. V. Allien & Co., New York.	May 28, 1885	2,150	946 00
Helmet spikes	Horstmann Bros. & Co., Philadelphia.	May 22, 1885	10,000	650 00
Helmet eagles	H. V. Allien & Co., New York.	May 28, 1885	6,032	255 93
Helmet bases	do	do	14,000	264 60
Helmet scrolls and rings ..	do	do	18,000	120 60
Helmet numbers	do	do	64,484	419 14
Helmet cords and bands ..	Edward Eicke, New York	May 23, 1885	2,000	942 50
Helmet eagle devices				
Helmet chin straps				
Cap caduceus				
Cap letters				
Cap castles				
Cap crossed sabers	Horstmann Bros. & Co., Philadelphia.	May 22, 1885	2,000	29 60
Cap crossed rifles	do	do	3,500	51 80
Cap crossed cannon	do	do	1,000	14 80
Grommets, brass, No. 1	Rowland A. Robbins, New York.	May 27, 1885	3,883	17 55
Grommets, brass, No. 3	do	do	25,776	130 67
Grommets, brass, No. 4				
Grommets, brass, No. 5	Horstmann Bros. & Co., Philadelphia.	May 22, 1885	9,800	125 22
Rings galvanised iron	do	do	450	61 87

purchased by the Quartermaster's Department, &c.—Continued.

PHILADELPHIA, PA.—Continued.

Purchased in open market.				Total.	
From whom purchased.	Date of purchase.	Quantity purchased.	Cost.	Quantity.	Cost.
Hood, Bonbright & Co., Philadelphia.	Oct. 29, 1885	100 gro.	\$8 50	100 gro.	\$8 50
.....do	Sept. 30, 1885	13, 104 gro.	33 21	13, 104 gro.	33 21
The John Shilleto Company, Cincinnati.	Jan. 9, 1886	35 gro.	8 75	95 gro.	25 55
Hood, Bonbright & Co., Philadelphia.	Oct. 29, 1885	1, 032 gro.	2, 048 52	1, 987 gro.	3, 547 87
.....do .....	.....do	1, 027 gro.	1, 021 86	1, 730 gro.	1, 573 71
T. A. Ashburner, Philadelphia.	Sept. 30, 1885	35, 007 yds.	106 97	.....	.....
.....	.....	.....	.....	80, 630 yds.	252 71
Thos. G. Hood, Philadelphia.	Jan. 9, 1886	14, 616 yds.	54 30	43, 366 yds.	146 14
John Wanamaker, Philadelphia.	July 31, 1885	10, 000 spools	112 50	300 ozs.	135 00
.....do .....	.....do	3, 000 spools	168 75	.....	.....
Hood, Bonbright & Co., Philadelphia.	Sept. 30, 1885	25, 000 spools	348 75	38, 000 spools	630 00
John Wanamaker, Philadelphia.	.....do	10, 000 spools	200 00	.....	.....
Hood, Bonbright & Co., Philadelphia.	Oct. 29, 1885	2, 500 spools	49 00	.....	.....
.....do .....	.....do	500 spools	29 37	13, 000 spools	278 37
S. Goodman, Philadelphia.	Oct. 8, 1885	50 spools	3 00	.....	.....
.....	.....	.....	.....	1, 031 spools	54 31
John Wanamaker, Philadelphia.	Sept. 30, 1885	5, 000 spools	25 00	.....	.....
.....do .....	.....do	5, 000 spools	35 00	1, 760 ozs.	914 40
.....do .....	.....do	5, 000 spools	80 00	15, 000 spools	.....
Hood, Bonbright & Co., Philadelphia.	Oct. 29, 1886	15 lbs.	90 00	500 ozs.	225 00
James K. Michael, New York.	Oct. 2, 1886	36, 012 spools	1, 167 39	180 ozs.	90 00
.....	.....	.....	.....	36, 012 spools	1, 167 39
.....	.....	.....	.....	3, 200 spools	108 00
.....	.....	.....	.....	38, 704 spools	1, 306 26
Sullivan & Bro., Philadelphia.	May 20, 1885	574 lbs.	487 90	574 lbs.	487 90
S. Goodman, Philadelphia.	Oct. 8, 1885	500 lbs.	775 00	2, 000 lbs.	3, 000 00
Rowland A. Robbins, New York.	Jan. 9, 1886	500 lbs.	419 50	500 lbs.	775 00
.....	.....	.....	.....	500 lbs.	419 50
.....	.....	.....	.....	2, 500	410 00
.....	.....	.....	.....	32, 000	134 40
Horstmann Bros. & Co., Philadelphia.	Nov. 28, 1885	79	31 60	2, 229	977 60
.....	.....	.....	.....	10, 000	650 00
.....	.....	.....	.....	6, 022	255 93
.....	.....	.....	.....	14, 000	264 60
.....	.....	.....	.....	18, 000	120 00
.....	.....	.....	.....	64, 484	419 14
Edward Eicke, New York.	Nov. 28, 1885	83	41 39	2, 083	983 89
J. H. Wilson, Philadelphia.	June 16, 1885	1, 400	24 50	1, 400	24 50
Horstmann Bros. & Co., Philadelphia.	Mar. 1, 1886	150	4 95	150	4 95
J. H. Wilson, Philadelphia.	July 31, 1885	300	5 25	300	5 25
.....do	Mar. 1, 1886	100	1 00	100	1 00
.....do	Sept. 14, 1885	500	72 50	500	72 50
.....	.....	.....	.....	2, 000	29 60
.....	.....	.....	.....	3 500	51 80
.....	.....	.....	.....	1, 000	14 80
Horstmann Bros. & Co., Philadelphia.	Oct. 29, 1885	50 gro.	23 75	11, 088	41 30
John Welsh, Philadelphia.	Oct. 28, 1885	150 gro.	115 87	.....	.....
Rowland A. Robbins, New York.	Jan. 9, 1886	150 gro.	125 85	68, 876	372 39
J. Jacob Shannon, Philadelphia.	May 16, 1885	5, 600	42 77	5, 600	42 77
.....	.....	.....	.....	9, 890	125 22
Pitkin & Thomas, Philadelphia.	May 16, 1885	1, 097 lbs.	149 74	450 lbs.	211 61
.....	.....	.....	.....	1, 097	.....

B.—Detailed statement of articles of clothing, equipage, and materials

PHILADELPHIA, PA.—Continued.

Articles.	Purchased under contract.			
	Contractor.	Date of contract.	Quantity delivered.	Cost.
Mosquito bars.....	James R. Michael, New York.	May 23, 1885	1,500	\$1,350 00
Mosquito head-nets.....				
Metal tent slips, No. 1.....	Isaac Townsend, Philadelphia.	May 28, 1885	1,000	100 00
Metal tent slips, No. 2.....	Isaac Townsend, Philadelphia.	May 28, 1885	3,500	280 00
Metal tent slips, No. 3.....	do.	do.	27,000	1,282 50
Tent poles, shelter.....				
Tent pins, shelter.....				
Do.....				
Do.....				
Do.....				
Manila line, 6-thread.....	Horstmann Bros. & Co., Philadelphia.	May 22, 1884	4,600 lbs.	575 00
Manila line, 9-thread.....	Uhler & English, Philadelphia.	May 20, 1885	3,460 lbs.	432 50
Manila line, 12-thread.....	do.	do.	1,173 lbs.	140 76
Rope, cotton.....				
Do.....				
Gilling line, No. 3.....	John Welsh, Philadelphia.	June 2, 1885	830 lbs.	141 10
Gilling line, No. 2.....	Uhler & English, Philadelphia.	May 29, 1885	25 lbs.	4 62
Cord, Silver Lake cotton.....				
Cord, braided cotton.....				
Twine, five-fold cotton.....	Thomas G. Hood, Philadelphia.	June 3, 1885	1,758 lbs.	318 44
Braid, worsted, 2-inch.....	Horstmann Bros. & Co., Philadelphia.	May 22, 1885	508 yds.	5 08
Do.....				
Do.....				
Braid, worsted, 1-inch.....				
Cord, mohair.....	Horstmann Bros. & Co., Philadelphia.	May 22, 1885	5,000 yds.	337 50
Russet leather.....	Uhler & English, Philadelphia.	May 29, 1885	158½ sq. ft.	28 53
Mattresses.....	Thomas G. Hood, Philadelphia.	Dec. 26, 1885	5,003	9,975 98
Pillows.....	do.	do.	5,002	1,488 09
Pillow cases.....	The John Shilleto Company, Cincinnati, Ohio.	Dec. 30, 1885	10,000	798 00
Mattress covers.....	Thomas G. Hood, Philadelphia.	Oct. 19, 1885	9,140	6,261 57
Do.....	The John Shilleto Company, Cincinnati, Ohio.	Dec. 30, 1885	10,000	6,445 00
Gold lace.....	Horstmann Bros. & Co., Philadelphia.	May 22, 1885	10,000 yds.	8,250 00
Do.....	J. H. McKenney & Co., Philadelphia.	Oct. 30, 1885	10,000 yds.	8,912 50
Webbing, linen, 1-inch.....	Horstmann Bros. & Co., Philadelphia.	May 22, 1885	7,500 yds.	596 25
Do.....				
Webbing, linen, 1½-inch.....	Horstmann Bros. & Co., Philadelphia.	May 22, 1885	7,570 yds.	358 06
Do.....				
Webbing, linen, 1½-inch.....				
Webbing, cotton, 1½-inch.....				
Webbing, silk, 1½-inch.....				
Needles.....	Thomas G. Hood, Philadelphia.	June 3, 1885	500,000	659 50
Clothing tickets.....				
Do.....				
Hooks and eyes, large.....				
Drums, standard.....	Rudolph Wurlitzer & Bro., Cincinnati, Ohio.	June 20, 1885	50	310 00
Drums, with polished shell.....	do.	do.	50	362 50
Nickel rods, for drums.....				
Flesh-hoops, for drums.....				
Snare fixtures for drums.....				
Trumpets, F.....	Rudolph Wurlitzer & Bro., Cincinnati, Ohio.	June 20, 1885	150	253 50
Trumpets, G, with F slide.....				
Beeswax.....	Uhler & English, Philadelphia.	May 29, 1885	351 lbs.	120 02
Trumpet cords and tassels.....	Horstmann Bros. & Co., Philadelphia.	May 22, 1885	100	47 50
Trumpet crooks.....				
Marking stamps.....				
Do.....				
Do.....				
Rubber stamps.....				
Indelible ink.....				

purchased by the Quartermaster's Department, &c.—Continued.

PHILADELPHIA, PA.—Continued.

Purchased in open market.				Total.	
From whom purchased.	Date of purchase.	Quantity purchased.	Cost.	Quantity.	Cost.
S. Roebuck, New York	May 19, 1886	180	\$63 00	1,500	\$1,350 00
Isaac Townsend, Philadelphia	Jan. 9, 1886	500	50 00	180	63 00
Isaac Townsend, Philadelphia	Jan. 9, 1886	1,000	80 00	1,500	150 00
do	do	3,500	106 25	4,500	360 00
Francis Cundey, Philadelphia	July 31, 1885	250	10 00	30,500	1,448 75
Welsh Bros., Philadelphia	do	1,500	15 00	250	10 00
Pitkin & Thomas, Philadelphia.	do	3,000	30 00		
Francis Cundey, Philadelphia	Nov. 27, 1885	3,000	25 50		
do	Dec. 24, 1885	6,000	64 50	13,500	135 00
				4,600 lbs.	575 00
William A. Wheeler, New York.	Oct. 28, 1885	1,020 lbs.	135 15	4,480 lbs.	567 65
Pitkin & Thomas, Philadelphia	May 16, 1885	1,299 lbs.	181 73	1,173 lbs.	140 76
do	Oct. 28, 1885	1,012 lbs.	154 22	2,311 lbs.	335 95
Isaac Townsend, Philadelphia	do	998 lbs.	162 17	1,828 lbs.	303 27
Paul J. Field, Philadelphia	May 16, 1885	836½ lbs.	292 77	25 lbs.	4 62
Isaac Townsend, Philadelphia	Jan. 9, 1886	499½ lbs.	144 85	836½ lbs.	292 77
John Wanamaker, Philadelphia.	July 31, 1885	8,613 yds.	81 56	499½ lbs.	144 85
Horstmann Bros. & Co., Philadelphia.	Oct. 29, 1885	10,451 yds.	90 72	1,758 lbs.	316 44
John Wanamaker, Philadelphia.	do	1,068 yds.	4 44		
Horstmann Bros. & Co., Philadelphia.	Apr. 6, 1886	144 yds.	2 88	20,580 yds.	181 80
do	July 31, 1885	700 yds.	47 25	144 yds.	2 88
Uhler & English, Philadelphia	Oct. 28, 1885	152½ sq.ft.	24 36	5,700 yds.	384 75
				310½ sq.ft.	52 89
				5,003	9,975 89
				5,002	1,488 09
				10,000	798 00
				19,149	12,706 57
H. V. Allien & Co., New York City.	Aug. 1, 1885	5,095½ yds.	4,083 07		
				25,095½ yds.	21,245 57
Horstmann Bros. & Co., Philadelphia.	Aug. 4, 1885	8,000 yds.	628 00		
do	Oct. 8, 1885	5,017 yds.	393 83	20,517 yds.	1,618 08
do	Aug. 4, 1885	12,099½ yds.	566 24		
do	Oct. 8, 1885	15,000 yds.	702 00	34,669½ yds.	1,626 30
do	Feb. 20, 1886	3 yds.	45	3 yds.	45
do	Oct. 26, 1885	54 yds.	20 16	504 yds.	20 16
do	Feb. 20, 1886	3 yds.	2 55	3 yds.	2 55
Altamus & Co., Philadelphia	Aug. 10, 1885	60,000	22 80	500,000	659 50
do	Nov. 30, 1885	150,000	57 00		
Hood, Bonbright & Co., Philadelphia.	Oct. 29, 1885	300 gro.	177 00	210,000	79 80
				300 gro.	177 00
Rudolph Wurlitzer & Bro., Cincinnati, Ohio.	Oct. 8, 1885	4	1 20	100	672 50
do	do	4	50	4	1 20
do	do	2	80	2	40
				150	80
					253 50
J. Howard Foote, New York.	Dec. 15, 1885	100	167 00	100	167 00
Uhler & English, Philadelphia	Oct. 28, 1885	317 lbs.	91 61	668 lbs.	212 53
				100	47 50
Rudolph Wurlitzer & Bro., Cincinnati, Ohio.	May 7, 1886	83	32 98	83	32 98
Peiffer Bros., Philadelphia	Oct. 24, 1885	40	73 60		
do	Feb. 23, 1886	1	3 00		
do	Apr. 29, 1886	1	4 00	42	80 60
do	Oct. 24, 1885	10	3 00	10	3 00
do	Aug. 4, 1885	16 pts.	17 60		

B.—Detailed statement of articles of clothing, equipage, and materials

PHILADELPHIA, PA.—Continued.

Articles.	Purchased under contract.			
	Contractor.	Date of contract.	Quantity delivered.	Cost.
Indelible ink.....				
Indelible ink, 2-ounce bottles.....				
Stencil brushes.....				
Pads for stamps.....				
Letters, brass.....	Horstmann Bros. & Co., Philadelphia.	May 22, 1885	72,500	\$155 87
Numbers, brass.....	do	do	62,500	134 37
Flag halliards, garrison.....				
Do.....				
Do.....				
Baling cloth.....	Charles Conrad & Son, Philadelphia.	May 25, 1885	9,790 yards	2,043 65
Sibley tent-pole straps.....				
Campaign hat-cords and tassels.....				
Wrapping paper.....	Philip Rudolph, Philadelphia.	June 5, 1885	16,000 lbs. (200 reams)	944 00
Petroleum paper.....	John Wanamaker, Philadelphia.	June 13, 1885	24,000 lbs.	660 00
Tailor's crayons.....	do	do	150 boxes	30 75
Shoulder knots and aiguillettes.....				
Music pouches.....				
Do.....				
Lyres, silver-plated.....				
Devices for flag-halliards.....				
Tags for fire-gilt buttons.....				
Card holders for iron bunks.....				
Grommet punches.....				
Iron bedsteads.....	The Wire Web Bed Company, Hartford, Conn.	Jan. 2, 1886	350	952 00
Frame-work for canopy or awning.....				
Japanned slides.....				
Shoes, "Wankenphast".....				
Blouse.....				
Books, letters received, and index.....				
Saddle-cloths.....				
Do.....				
Chapeau.....				
Do.....				
Wreath, engineers.....				
Canvas tie-clippers.....	D. W. Butler & Co., Boston, Mass.	May 8, 1886	5,000 prs	4,775 00
Sealing-wax.....				
Baling-rope, jute, §.....				
Twine-flax, sewing.....				
Do.....				
Twine, blocking.....				
Twine, heavy.....				
Rosin.....				
Sewing palms.....				
Manila tissue paper.....				
Burlaps.....				
Pattern-board.....				
Circulars to bidders.....				
Do.....				

purchased by the Quartermaster's Department, &c.—Continued.

PHILADELPHIA, PA.—Continued.

Purchased in open market.				Total.	
From whom purchased.	Date of purchase.	Quantity purchased.	Cost.	Quantity.	Cost.
Petiffer Bros., Philadelphia...	Nov. 19, 1885	32 pts.	\$35 20	48	\$52 80
S. H. Quint & Son, Philadelphia.	Dec. 16, 1885	1,000 bots.	100 00	1,000 bots.	100 00
Petiffer Bros., Philadelphia...	Aug. 4, 1885	18	1 95	18	1 95
.....do.....	.....do.....	7	35	7	35
.....do.....	.....do.....	.....	.....	72,500	155 87
.....do.....	.....do.....	.....	.....	62,500	134 37
Uhler & English, Philadelphia	Aug. 1, 1885	688 lbs.	143 79	.....	.....
.....do.....	Aug. 10, 1885	26 lbs.	6 11	.....	.....
.....do.....	Sept. 1, 1885	25½ lbs.	5 99	.....	.....
.....do.....	Sept. 30, 1885	2,796 lbs.	584 36	314	740 25
.....do.....	.....do.....	.....	.....	9,790 yards	2,043 65
Horstmann Bros. & Co., Philadelphia.	Oct. 29, 1885	500	80 00	500	80 00
.....do.....	Oct. 17, 1885	6 dozen	9 72	6 doz.	9 72
.....do.....	.....do.....	.....	.....	16,000 lbs.	944 00
.....do.....	.....do.....	.....	.....	24,000 lbs.	660 00
.....do.....	.....do.....	.....	.....	150 boxes	30 75
Horstmann Bros. & Co., Philadelphia.	Nov. 28, 1885	.....	.....	116	157 76
H. V. Allien & Co., New York.	.....do.....	116	157 76	.....	.....
.....do.....	.....do.....	67	365 15	.....	.....
.....do.....	June 5, 1886	136	741 20	358	1,982 10
.....do.....	.....do.....	155	875 75	.....	.....
J. H. Wilson, Philadelphia...	.....do.....	500	15 00	500	15 00
Isaac Townsend, Philadelphia	Sept. 14, 1885	350 pairs	52 50	350 pairs	52 50
Altamus & Co., Philadelphia.	.....do.....	10,000	13 50	10,000	13 50
Paul J. Field, Philadelphia...	Sept. 30, 1885	3,000	36 00	3,000	36 00
.....do.....	Oct. 29, 1885	4	2 96	4	2 96
.....do.....	.....do.....	.....	.....	350	952 00
David Pettit, Philadelphia...	Apr. 1, 1886	1	78 00	1	78 00
Paul J. Field, Philadelphia...	May 16, 1885	1,512	29 92	1,512	29 92
Jacob Bool, Washington, D. C.	Oct. 29, 1885	1 pr.	3 00	1 pair	3 00
Hatfield & Son, New York...	Nov. 1, 1885	1	42 30	1	42 30
Joe. H. Mann, Philadelphia...	Dec. 29, 1885	1	15 75	1	15 75
Horstmann Bros. & Co., Philadelphia.	Jan. 6, 1886	3	12 00	3	12 00
.....do.....	.....do.....	1	12 00	1	12 00
Rymold & Whitlock, New York.	Mch. 29, 1886	1	20 00	1	20 00
H. V. Allien & Co., New York.	Mch. 25, 1886	1	18 00	1	18 00
.....do.....	.....do.....	1	3 00	1	3 00
.....do.....	.....do.....	.....	.....	5,000 pairs	4,775 00
Altamus & Co., Philadelphia.	Oct. 6, 1885	200 lbs.	42 00	200 lbs.	42 00
Uhler & English, Philadelphia.	Sept. 15, 1885	3,060 lbs.	165 24	3,060 lbs.	165 24
.....do.....	.....do.....	96 lbs.	33 10	96 lbs.	33 10
John Wanamaker, Philadelphia.	.....do.....	50 lbs.	14 50	50 lbs.	14 50
John T. Bailey & Co., Philadelphia.	Oct. 6, 1885	700 lbs.	84 00	700 lbs.	84 00
.....do.....	.....do.....	750 lbs.	82 50	750 lbs.	82 50
Uhler & English, Philadelphia.	.....do.....	1 bbl.	2 00	1 bbl.	2 00
Paul J. Field, Philadelphia...	.....do.....	12	14 49	12	14 49
.....do.....	.....do.....	15 rms.	12 90	15 rms.	12 90
John Wanamaker, Philadelphia.	Oct. 16, 1885	5,648 yds.	398 89	5,648 yards	398 89
.....do.....	Mch. 26, 1886	300 lbs.	46 50	300 lbs.	46 50
Altamus & Co., Philadelphia.	Nov. 29, 1885	200	32 00	.....	.....
.....do.....	Apr. 23, 1886	500	69 75	700	101 75

B.—Detailed statement of articles of clothing, equipage, and materials

FORT LEAVENWORTH MILITARY PRISON.

Articles.	Purchased under contract.			
	Contractor.	Date of contract.	Quantity delivered.	Cost.
Awls, pricking.....	John K. Krieg, New York.....	June 20, 1885	100	\$2 95
Awls, strip.....	Whitcher & Emery, Boston.....	do	72	9 90
Breaks, crimping.....	Eddy, Russell & Co., Boston.....	do	4	136 00
Brushes, round bristle.....	Whitcher & Emery, Boston.....	Feb. 26, 1886	2	6 50
Creasers.....	John K. Krieg, New York.....	June 20, 1885	24	2 70
Dies, counter.....	Mantle & Cowan, Louisville, Ky.....	do	3	8 25
Dies, heel.....	do	do	6	13 50
Dies, outsole.....	do	do	16	43 20
Do.....	George H. Van Pelt, Chicago..	Dec. 15, 1886	15	37 50
Do.....	do	Jan. 20, 1886	60	150 00
Dies, insole.....	Mantle & Cowan, Louisville, Ky.....	June 12, 1885	16	40 00
Do.....	George H. Van Pelt, Chicago..	Dec. 15, 1885	15	37 50
Do.....	do	Jan. 12, 1886	60	150 00
Dies, slipsole.....	Mantle & Cowan, Louisville, Ky.....	June 20, 1885	16	40 00
Do.....	George H. Van Pelt, Chicago..	Dec. 15, 1885	15	33 75
Do.....	do	Jan. 12, 1886	60	135 00
Dies, facing.....	Turner & Ray, Chicago.....	June 20, 1885	4	2 00
Dusters, feather.....	M. L. Eddy, Boston.....	May 27, 1886	184 prs.	441 60
Feet, automatic boot-tree.....	do	do	272 prs.	652 80
Feet, automatic shoe-tree.....	do	do	1 set.	1 60
Figures, steel.....	Whitcher & Emery, Boston.....	June 20, 1885	2	1 60
Do.....	John K. Krieg & Co., New York.....	Dec. 15, 1885	2	45 00
Files, heel-filing machines.....	John K. Krieg, New York.....	June 20, 1885	3 sets.	130 00
Forms, crimping.....	Whitcher & Emery, Boston.....	do	500 prs.	14 00
Haft's awl, patent.....	Edwards & Castle, Philadelphia.....	do	240	8 16
Hammers, crimpin.....	Whitcher & Emery, Boston.....	Feb. 26, 1886	12	3 00
Hammers, Hammond.....	Edwards & Castle, Philadelphia.....	do	12	5 00
Knives, breasting.....	Laing & Maginnis, Philadelphia.....	June 20, 1885	24	23 10
Knives, cutting.....	John K. Krieg, New York.....	do	252	13 80
Knives, guard.....	Laing & Maginnis, Philadelphia.....	do	144	12 00
Knives, McK. & B. heel-ing machines.....	do	do	24	12 00
Do.....	John K. Krieg, New York.....	do	24	12 00
Knives, machine skiving.....	Eddy, Russell & Co., Boston.....	do	12	7 20
Do.....	Whitcher & Emery, Boston.....	Feb. 26, 1886	36	3 24
Knives, Gallagher shears.....	do	do	2 sets.	2 20
Lamps, kit.....	John K. Krieg, New York.....	June 20, 1885	36	10 80
Lasts, common.....	Mantle & Cowan, Louisville, Ky.....	June 17, 1885	800 prs.	504 00
Lasts, iron-soled.....	do	do	140 prs.	91 00
Lasts, Waukenphaast.....	G. H. Van Pelt, Chicago.....	Dec. 15, 1885	1,960 prs.	1,764 00
Do.....	do	Jan. 12, 1886	1	50
Letters, steel.....	John K. Krieg & Co., New York.....	Dec. 15, 1885	1	18 00
Machines, eyelet.....	John K. Krieg, New York.....	June 20, 1885	1	190 00
Machines, leveling.....	Turner & Ray, Chicago.....	do	2	270 00
Machines, national wax-thread.....	do	do	10	350 00
Machines, W. and W.....	Whitcher & Emery, Boston.....	do	1	15 00
Machines, Chase skiving.....	Whitcher & Emery, Boston.....	Feb. 26, 1886	12	12 36
Machines, Tripp's skiving.....	do	do	239 parts	78 91
Nippers, wire.....	John K. Krieg, New York.....	Jan. 4, 1886	47 parts	40 29
Parts of stitching machine.....	do	do	24 parts	8 40
Parts of healing machine.....	do	do	49 parts	16 67
Parts of channeling machine.....	G. and McK. S. M. Co., Boston.....	do	26 parts	15 28
Do.....	John K. Krieg, New York.....	do	24 parts	4 72
Parts of welt, groover, and beveler machine.....	do	do	84 parts	38 82
Parts of welt machine.....	G. and McK. S. M. Co., Boston.....	do	do	do
Do.....	John K. Krieg, New York.....	do	do	do
Do.....	do	do	do	do
Do.....	do	do	do	do

purchased by the Quartermaster's Department, &c.—Continued.

FORT LEAVENWORTH MILITARY PRISON.

Purchased in open market.				Total.	
From whom purchased.	Date of purchase.	Quantity purchased.	Cost.	Quantity.	Cost.
				100	\$2 95
				72	9 90
				4	136 00
John K. Krieg, New York....	Oct. 19, 1886	2	\$15 00	4	21 50
				24	2 70
				3	8 25
				6	13 50
				91	230 70
				91	227 50
				91	208 75
George H. Van Pelt, Chicago...	Feb. 11, 1886	2	7 50	2	7 50
				4	2 00
O. A. Miller, Brockton, Mass...	Apr. 14, 1886	24 prs.	60 00	208 prs.	501 60
				272 prs.	652 80
				1 set.	1 60
				2	1 60
				3 sets.	45 00
				500 prs.	130 00
				240	14 00
				12	8 16
				12	3 00
				24	5 00
				252	23 10
				144	13 80
				48	24 00
Amazon Skiving Machine Company.	Nov. 24, 1885	12	9 13	24	16 33
				36	3 24
				2 sets.	2 20
				36	10 80
				800 prs.	504 00
G. H. Van Pelt, Chicago.....	Dec. 29, 1885	46 prs.	46 00	46 prs.	46 00
				2, 100 prs.	1, 855 00
				1	50
				1	18 00
				1	190 00
				2	270 00
				10	350 00
Eddy, Russell & Co., Boston...	Dec. 11, 1885	1	14 00	1	14 00
				1	15 00
				12	12 36
				239 parts	78 91
McK. and B. H. M. Ass'n, Boston.	Apr. 26, 1886	3 parts	8 25	50 parts	48 54
				73 parts	25 07
				26 parts	15 28
G. & McK. S. M. Co., Boston...	July 27, 1885	4 parts	3 00		
do	Aug. 15, 1885	4 parts	5 36		
do	Nov. 14, 1885	28 parts	0 20		
do	Apr. 27, 1886	4 parts	3 00	158 parts	61 10

B.—Detailed statement of articles of clothing, equipage, and materials

FORT LEAVENWORTH MILITARY PRISON—Continued.

Articles.	Purchased under contract.			
	Contractor.	Date of contract.	Quantity delivered.	Cost.
Parts of national wax-thread machine.	Turner & Ray, Chicago.....	June 20, 1885	24 parts	\$0 96
Do .....	.....	.....	.....	.....
Do .....	.....	.....	.....	.....
Parts of W. and W. machines.	Whitcher & Emery, Boston....	June 20, 1885	8 parts	27 00
Do	John K. Krieg, New York.....	do	122 parts	5 63
Parts of pricking machine.	do	do	8 parts	8 00
Parts of sole-molding machine.	Whitcher & Emery, Boston....	Feb. 26, 1886	2 parts	3 00
Pincers, shoe	Laing & Maginnis, Philadelphia	June 20, 1885	72	33 00
Planes, edge with pres- ers.	E. E. Spencer, New York	do	216	324 00
Do	Whitcher & Emery, Boston....	Feb. 26, 1886	36	57 60
Screws, crimping	do	do	1,000	175 00
Shaves, heel	Laing & Maginnis, Philadelphia	June 20, 1885	204	97 75
Shears, cutting	Fred. A. Miller, Leavenworth, Kans.	Nov. 27, 1885	12	10 80
Sticks, colt	E. E. Spencer, New York	June 20, 1885	12	3 00
Sticks, long	do	do	12	2 75
Stones, oil	Laing & Maginnis, Philadelphia	do	27	40 50
Trees, boot, automatic	Eddy, Russell & Co., Boston....	do	5 sets	187 50
Do	M. L. Eddy, Boston	May 27, 1886	4 sets	150 00
Trees, shoe, automatic	Turner & Ray, Chicago	June 20, 1885	9 sets	288 00
Do	M. L. Eddy, Boston	May 27, 1886	5 sets	140 00
Trimmers, welt	John K. Krieg, New York	June 20, 1885	60	24 00
Acid, oxalic	George A. Eddy, Leavenworth, Kans.	May 14, 1886	10 lbs.	2 50
Awls, sewing	Turner & Ray, Chicago	June 20, 1885	32 gross	41 60
Bristles, sewing	Mantle & Cowan, Louisville, Ky.	do	15 lbs.	210 00
Brushes, ink, round	Whitcher & Emery, Boston....	do	192	4 80
Brushes, ink, flat	do	do	108	5 40
Cement, channel	do	do	50 galls.	43 00
Dressing, shoe	Mantle & Cowan, Louisville, Ky.	do	216 galls.	160 20
Duck, cotton	Schuneman & Evans, Leaven- worth, Kans.	Nov. 20, 1885	4,375 yds.	809 37
Eyelets	Laing & Maginnis, Philadelphia	June 20, 1885	600,000	40 50
Do	Lang & King, Leavenworth, Kans.	July 29, 1885	1,000,000	66 25
Flour, rye	do	June 20, 1885	1,800 lbs.	63 00
Do	H. F. Laing & Co., Leaven- worth, Kans.	do	1,200 lbs.	42 00
Gum tragacanth	Laing & Maginnis, Philadelphia	do	100 lbs.	50 00
Hooks, eyelet .....	.....	.....	.....	.....
Hooks, lacing .....	.....	.....	.....	.....
Ink, burnishing	Turner & Ray, Chicago	June 20, 1885	200 galls.	70 00
Ink, indelible	J. K. Krieg & Co., New York....	Apr. 2, 1886	12 btls.	3 75
Laces, porpoise shoe	Laing & Maginnis, Philadelphia	June 17, 1885	15,500 pairs	1,085 00
Do	Lang & King, Leavenworth, Kans.	July 18, 1885	15,500 pairs	1,085 00
Do	do	July 29, 1885	41,000 pairs	1,742 50
Lacing, studs	Tubular Rivet Company, Bos- ton.	June 17, 1885	750,000	1,753 74
Leather, calf-skin	England & Bryan, Philadelphia.	do	8,247 lbs.	6,927 48
Do	Bremen Tanning Company, Saint Louis.	do	8,246½ lbs.	6,927 37
Do	England & Bryan, Philadelphia.	do	14,500 lbs.	11,563 75
Do	Bremen Tanning Company, Saint Louis.	do	11,251 lbs.	8,944 55
Do	do	do	11,251 lbs.	8,325 74
Leather, counter	England & Bryan, Philadelphia	June 17, 1885	11,000 lbs.	8,520 00
Do	do	do	10,250 lbs.	3,100 63
Leather, pebble grain	do	do	40,000 sq. ft.	8,240 00
Do	do	do	40,000 sq. ft.	8,160 00
Do	do	do	40,000 sq. ft.	7,960 01
Leather, sheepskin-skiv- ers.	Chas. H. Tigh, Boston	do	25,000 sq. ft.	1,468 75
Leather, sole	England & Bryan, Philadelphia	do	55,000 lbs.	18,067 50
Do	do	do	60,000 lbs.	19,620 00

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FORT LEAVENWORTH MILITARY PRISON—Continued.

Purchased in open market.				Total.	
From whom purchased.	Date of purchase.	Quantity purchased.	Cost.	Quantity.	Cost.
National S. M. Co., Boston....	Oct. 19, 1885	2 parts	\$6 24		
.....do	Dec. 11, 1885	60 parts	17 10		
Teter L. Cox, Boston.....	Feb. 10, 1886	52 parts	13 80	138 parts	\$38 10
L. J. Trussell, Leavenworth, Kans.	Oct. 13, 1885	121 parts	26 03		
				251 parts	58 66
				8 parts	8 00
John Wilson, Leavenworth, Kans.	Apr. 17, 1886	2 parts	9 80	4 parts	12 80
				72	33 00
				252	381 60
				1,000	175 00
				204	97 75
				12	10 80
				12	3 00
				12	2 75
				72	40 50
				9 sets	337 50
				14 sets	428 00
				60	24 00
Geo. A. Eddy, Leavenworth, Kans.	Oct. 13, 1885	10 lbs.	1 60	20 lbs.	4 10
				32 gross	41 60
				15 lbs.	210 00
				192	4 80
				108	5 40
				50 galls.	43 00
				216 galls.	160 20
				4,375 yds.	800 37
Lang & King, Leavenworth, Kans.	July 25, 1885	5,000	63		
Laing & Maginnis, Philadel- phia.	...do	50,000	4 00	1,655,000	111 38
				3,000 lbs.	105 00
				100 lbs.	50 00
Lang & King, Leavenworth, Kans.	July 25, 1885	5,000	6 25	5,000	6 25
Laing & Maginnis, Philadel- phia.	...do	24,000	33 60	24,000	33 60
				200 galls.	70 00
				12 bo'tls	3 75
				72,000 pairs	3,912 50
Tubular Rivet Company, Boston.	May 7, 1886	360,000	841 80	1,110,000	2,595 54
				53,495½ lbs.	42,688 89
				21,250 lbs.	6,620 63
				120,000 sq. ft.	24,380 01
				2,500 sq. ft.	1,468 75

B.—Detailed statement of articles of clothing, equipage, and materials

FORT LEAVENWORTH MILITARY PRISON—Continued.

Articles.	Purchased under contract.			
	Contractor.	Date of contract.	Quantity delivered.	Cost.
Leather, sole	England & Bryan, Philadelphia	June 17, 1885	60,000½ lbs.	\$19,320 08
Do	do	do	54,999½ lbs.	17,544 92
Leather, wax upper	do	do	72,000 sq. ft.	13,320 00
Do	do	do	72,000 sq. ft.	13,248 01
Do	do	do	72,000 sq. ft.	13,103 99
Do	do	do	62,000 sq. ft.	11,098 00
Do	do	do	33,249½ sq. ft.	5,752 12
Leather, welt	do	do	11,000 lbs.	3,575 00
Do	do	do	11,000 lbs.	3,520 00
Nails, American	R. A. Robbins, New York	June 20, 1885	4,100 lbs.	173 84
Nails, channel	do	do	400 lbs.	63 56
Do	Whitcher & Emery, Boston	Jan. 4, 1886	500 lbs.	69 50
Nails, Swede	R. A. Robbins, New York	June 20, 1885	8,091 lbs.	498 40
Do	Whitcher & Emery, Boston	Jan. 4, 1886	800 lbs.	50 40
Do	do	Feb. 26, 1886	600 lbs.	37 80
Needles, G. & McK	John K. Krieg, New York	June 20, 1885	8,000	348 60
Needles, W. and W	E. E. Spencer, New York	do	5,000	75 00
Needles, natl. wax-thread	Turner & Ray, Chicago	do	410	11 28
Do	do	Sep. 17, 1885	900	24 75
Oil, mineral	George A. Eddy, Leavenworth, Kans.	June 20, 1885	400 galls.	56 00
Oil, neat's-foot	Theo. Eggersdorff, Leavenworth, Kans.	do	240 galls.	117 60
Oil, sperm	do	do	do	do
Powder, emery	John K. Krieg, New York	June 20, 1885	30 lbs.	1 80
Rope, wire	Mantle & Cowan, Louisville, Ky	do	100 feet.	5 00
Salts, Epsom	George A. Eddy, Leavenworth, Kans.	Nov. 21, 1885	20 lbs.	60
Sand-paper	Park, Crancer & Co., Leavenworth, Kans.	do	2½ reams	7 50
Do	C. N. Stevens, Leavenworth, Kans.	do	2½ reams	7 50
Sandpaper, molded	do	do	do	do
Sponge	Whitcher & Emery, Boston	June 20, 1885	25 lbs.	56 25
Tacks, Scotch lasting	do	do	280 gross	49 93
Do	do	do	124 gross	51 41
Tacks, Swede	do	do	1,200 lbs.	143 64
Do	R. A. Robbins, New York	do	1,800 lbs.	170 17
Do	Whitcher & Emery, Boston	Feb. 26, 1886	600 lbs.	75 00
Thread, linen, dry	Lang & King, Leavenworth, Kans.	June 20, 1885	100 lbs.	240 00
Do	do	July 21, 1885	100 lbs.	208 00
Do	do	do	90 lbs.	216 90
Thread, machine, G. & McK	Laing & Maginnis, Philadelphia	June 17, 1885	8,120 lbs.	2,511 60
Thread, machine, natl. wax-thread	do	June 20, 1885	300 lbs.	180 00
Do	do	do	100 lbs.	70 00
Do	Whitcher & Emery, Boston	Jan. 4, 1886	100 lbs.	75 00
Thread, silk	Weaver, Bruns & Co., Leavenworth, Kans.	July 18, 1885	250 lbs.	1,622 50
Do	B. Y. Pipepy & Co., New York	do	250 lbs.	1,622 50
Thread, shoe	George A. King, Leavenworth, Kans.	June 17, 1885	1,200 lbs.	820 68
Wax, bees'	John K. Krieg, New York	June 20, 1885	25 lbs.	9 50
Wax, liquid	Turner & Ray, Chicago	do	60 galls.	39 00
Wax, machine	Laing & Maginnis, Philadelphia	do	2,700 lbs.	175 50
Wax, sewing	Edwards & Castle, Philadelphia	do	800 balls	3 20
Do	Turner & Ray, Philadelphia	do	900 balls	3 20
Do	Whitcher & Emery, Boston	do	800 balls	3 20
Do	do	Feb. 26, 1886	500 balls	1 90
Wire, cable-screw	do	do	do	do
Wire, brass	C. N. Stevens, Leavenworth, Kans.	Jan. 4, 1886	5 lbs.	1 10
Wire, steel	do	do	5 lbs.	50
Zinc, sheet	do	do	do	do
Do	Park, Crancer & Co., Leavenworth, Kans.	Feb. 26, 1886	10 sheets	30 00
Lumber, poplar	A. A. Fenn, Leavenworth, Kans.	Mar. 16, 1886	1,300 feet	71 50
Lumber, hickory	C. N. Stevens, Leavenworth, Kans.	June 17, 1885	12,000 feet	756 00
Do	do	June 20, 1885	3,000 feet	126 00

B.—Detailed statement of articles of clothing, equipage, and materials
FORT LEAVENWORTH MILITARY PRISON—Continued.

Articles.	Purchased under contract.			
	Contractor.	Date of contract.	Quantity delivered.	Cost.
Lumber, hickory	Robert Garrett & Co., Leavenworth, Kans.	Aug. 3, 1885	800 feet.	\$37 60
Do	C. N. Stevens & Co., Leavenworth, Kans.	Mar. 1, 1886	3,500 feet.	210 00
Iron, round	J. W. Park, Leavenworth, Kans.	June 20, 1885	6,000 lbs.	165 00
Nuts, iron	E. N. Stevens, Leavenworth, Kans.	.....do.....	375 lbs.	22 50
Sandpaper	J. K. Krieg, New York	.....do.....	90 qrs.	13 50
Seats and thongs, rawhide.	W. H. Preble, Chicago	Mar. 1, 1886	500	400 00
Do .....	.....	.....	.....	.....
Do .....	.....	.....	.....	.....
Do .....	.....	.....	.....	.....
Do .....	.....	.....	.....	.....
Do .....	.....	.....	.....	.....
Do .....	.....	.....	.....	.....
Do .....	.....	.....	.....	.....
Do .....	.....	.....	.....	.....
Thongs, rawhide .....	.....	.....	.....	.....
Broom corn	Marcus A. Kelly, Leavenworth, Kans.	June 17, 1885	62,400 lbs.	3,744 00
Broom handles .....	.....do.....	June 20, 1885	26,000	349 70
Broom needles	J. W. Park, Leavenworth, Kans.	.....do.....	24	9 60
Glue	George A. Eddy, Leavenworth, Kans.	.....do.....	100 lbs.	16 00
Do	Mantle & Cowan, Louisville, Ky.	.....do.....	101 lbs.	16 16
Tacks	R. A. Robbins, New York	.....do.....	650 pprs.	82 55
Twine, broom	J. W. Park, Leavenworth, Kans.	.....do.....	520 lbs.	119 60
Twine, flax .....	.....do.....	.....do.....	200 lbs.	44 00
Twine, hemp .....	.....do.....	.....do.....	300 lbs.	42 00
Wire, broom	B. Korman, Leavenworth, Kans.	.....do.....	1,040 lbs.	70 20
Lampblack	George A. Eddy, Leavenworth, Kans.	.....do.....	10 lbs.	2 00
Lumber, pine	T. A. Garrigues, Leavenworth, Kans.	June 17, 1885	117,000 ft.	1,983 15
Nails, cut	J. W. Park, Leavenworth, Kans.	June 20, 1885	260 lbs.	13 00
Do .....	.....do.....	.....do.....	150 lbs.	4 43
Do .....	.....do.....	.....do.....	1,850 lbs.	49 95
Do .....	.....do.....	.....do.....	1,300 lbs.	31 85
Nails, wrought .....	.....do.....	.....do.....	3,150 lbs.	132 30
Iron, hoop .....	.....do.....	.....do.....	3,000 lbs.	102 00
Paper, wrapping	Mantle & Cowan, Louisville, Ky.	.....do.....	560 lbs.	38 08
Screws	J. W. Park, Leavenworth, Kans.	.....do.....	340 grs.	47 60
Tags, shipping	George A. Spooner, Leavenworth, Kans.	Feb. 26, 1886	2,000	1 50
Turpentine	George A. Eddy, Leavenworth, Kans.	June 20, 1886	10 gals.	6 00
Sealing wax .....	.....	.....	.....	.....

SAN FRANCISCO, CAL.

Knit undershirts	San Francisco Pioneer Woolen Factory, San Francisco.	June 20, 1885	14,000	\$9,100 00
Woolen stockings .....	.....do.....	.....do.....	25,000 prs.	6,500 00
Woolen blankets .....	.....do.....	.....do.....	8,000	27,120 00
Do .....	.....do.....	June 5, 1885	18,000	61,200 00
Flannel, d. b., shirting .....	.....do.....	June 20, 1885	14,001½ yds.	11,466 22
Do .....	.....do.....	June 5, 1885	13,200 yds.	10,560 00
Do .....	.....do.....	.....do.....	20,000 yds.	16,000 00
Flannel, d. b., blouse .....	.....do.....	June 20, 1885	6,003½ yds.	6,904 02
Do .....	.....do.....	June 5, 1885	20,000 yds.	20,900 00
Do .....	.....do.....	.....do.....	30,000 yds.	31,350 00
Flannel, d. b., blouse, fine quality.	.....do.....	July 30, 1885	8,000 yds.	10,760 00

purchased by the Quartermaster's Department, &c.—Continued.

FORT LEAVENWORTH MILITARY PRISON—Continued.

Purchased in open market.				Total.	
From whom purchased.	Date of purchase.	Quantity purchased.	Cost.	Quantity.	Cost.
				25,300 feet.	\$1,129 60
				6,000 lbs.	165 00
				375 lbs.	22 50
				90 quires.	13 50
W. H. Preble, Chicago	Aug. 7, 1885	220	\$167 20		
do	Aug. 22, 1885	220	167 20		
do	Sept. 15, 1885	160	121 60		
do	Sept. 23, 1885	300	228 00		
do	Oct. 19, 1885	300	228 00		
do	Dec. 10, 1885	300	228 00		
do	Dec. 24, 1885	300	228 00		
do	Feb. 11, 1886	300	228 00		
do	Feb. 24, 1886	300	228 00		
do	Mar. 29, 1886	300	228 00		
do	June 11, 1886	300	228 00	3,500	2,680 00
do	Feb. 24, 1886	9	1 80	9	1 80
				62,400 lbs.	3,744 00
				26,000	349 70
				24	9 60
				201 lbs.	32 16
				650 pps.	82 55
				1,020 lbs.	205 60
				1,040 lbs.	70 20
				10 lbs.	2 00
				117,000 ft.	1,983 15
				6,710 lbs.	231 53
				3,000 lbs.	102 00
				560 lbs.	38 08
				340 grs.	47 60
Crew & Hewitt, Leavenworth, Kans.	Aug. 25, 1885	2,500	3 13	4,500	4 63
				10 gals.	6 00
Crew & Hewitt, Leavenworth, Kans.	Aug. 25, 1885	100 lbs.	22 00	100 lbs.	22 00

SAN FRANCISCO, CAL.

				14,000	\$9,100 00
				25,000 prs.	6,500 00
				26,000	85,320 00
				47,201½ yds.	38,026 22
				56,003½ yds.	59,154 02
San Francisco Pioneer Woolen Factory, San Francisco.	Dec. 21, 1885	1,300 yds.	\$2,080 00	9,300 yds.	12,840 00

B.—Detailed statement of articles of clothing, equipage, and materials

SAN FRANCISCO, CAL.—Continued.

Articles.	Purchased under contract.			
	Contractor.	Date of contract.	Quantity delivered.	Cost.
Flannel, blouse lining	Thos. G. Hood, Philadelphia ..	June 30, 1885	7,512½ yds.	\$1,669 97
Flannel, cape lining	B. Y. Pippet & Co., New York ..	do	1,462½ yds.	1,307 36
Flannel, canton	Thos. G. Hood, Philadelphia ..	do	40,085½ yds.	3,735 97
Cloth, d. b	San Francisco Pioneer Woolen Factory, San Francisco.	June 5, 1885	9,844½ yds.	19,443 63
Cotton stockings	A. E. Karelson, New York	June 20, 1885	25,001 prs.	2,593 85
Vest padding	Thos. G. Hood, Philadelphia ..	do	2,547½ yds.	239 49
Silk twist	do	do	80 lbs.	560 40
Silk thread	do	do	12 lbs.	79 20
Do	do	do	7 lbs.	47 60
Silk, chevron	do	do	8 lbs.	54 40
Do	do	do	17 lbs.	109 82
Drilling	do	do	10,000 yds.	704 00
Kersey	Golden Gate Woolen Manufacturing Co., San Francisco.	do	12,000 yds.	15,600 00
Campaign hats	Raymond & Whitlock, New York.	do	2,750	3,954 56
Corset jeans	H. L. Simon, San Francisco ..	do	2,000 yds.	172 50
Linen thread, d. b., No. 80 ..	do	do	190 lbs.	522 50
Linen thread, d. b., No. 80 ..	do	do	280 lbs.	693 00
Linen thread, d. b., No. 30 ..	do	do	340 lbs.	333 20
Linen thread, brown, No. 80 ..	do	do	65 lbs.	160 88
Linen thread, brown, No. 80 ..	do	do	32 lbs.	31 36
Cotton, No. 40	do	do	250 d. sps.	130 63
Cotton, No. 30	do	do	100 d. sps.	25 00
Leather gauntlets	Angora Robe and Glove Company, San José, Cal.	do	12,003 prs.	12,703 17
Berlin gloves	Horstmann Bros. & Co., Philadelphia, Pa.	do	20,000 prs.	2,700 00
Corn brooms	R. W. Simpson, San Francisco ..	do	3,500	612 50
Axes	Geo. T. Hawley, San Francisco ..	do	600	474 00
Ax-helves	do	do	1,000	200 00
Shovels	do	do	500	490 00
Italian cloth	J. R. Michael, New York	do	300 yds.	279 00
Hooks and eyes, small	do	do	24 gross.	21 12
Hooks and eyes, large	do	do	100 gross.	120 00
Buttons, fly	do	do	1,400 gross.	105 00
Buttons, suspender	do	do	937 gross.	93 70
Canvas padding	do	do	3,000 yds.	450 00
Clothing tickets	do	do	do	do
Do	do	do	do	do
Do	do	do	do	do
Do	do	do	do	do
Do	do	do	do	do
Cutter's schedules	do	do	do	do
Cutter's morning reports ..	do	do	do	do
Sealing pots	do	do	do	do
Stencil brushes	do	do	do	do
Wrought nails	do	do	do	do
Hoop iron	do	do	do	do
Packing boxes	do	do	do	do
Do	do	do	do	do
Do	do	do	do	do
Do	do	do	do	do
Do	do	do	do	do
Lumber	do	do	do	do
Buckles	do	do	do	do
Do	do	do	do	do
Stiles	do	do	do	do
Do	do	do	do	do
Steel dies	do	do	do	do
Patterns	do	do	do	do
Scrubbing-brushes	do	do	do	do

purchased by the Quartermaster's Department, &c.—Continued.

SAN FRANCISCO, CAL.—Continued.

Purchased in open market.				Total.	
From whom purchased.	Date of purchase.	Quantity purchased.	Cost.	Quantity.	Cost.
				7,512½ yds.	\$1,669 97
				1,462½ yds.	1,307 36
				40,085½ yds.	3,735 97
				9,844½ yds.	19,443 63
Murphy, Grant & Co., San Francisco, Cal.	Sept. 30, 1885	1,000 prs.	\$125 00	26,001 prs.	2,718 85
Stein, Simon & Co., San Francisco, Cal.	Feb. 20, 1886	2,000 yds.	230 00	4,547½ yds.	469 49
				80 lbs.	560 40
				19 lbs.	126 80
				25 lbs.	164 22
				10,000 yds.	704 00
San Francisco Pioneer Woolen Factory, San Francisco.	Jan. 6, 1886	2,000 yds.	2,650 00	14,000 yds.	18,250 00
				2,759	3,954 56
				2,000 yds.	172 50
				810 lbs.	1,548 70
				97 lbs.	192 24
				350 d. spls.	155 63
				12,003 prs.	12,703 17
				20,000 prs.	2,700 00
				3,500	612 50
				600	474 00
				1,000	200 00
				500	490 00
				300 yds.	279 00
				124 gross.	141 12
				1,400 gross.	105 00
				937 gross.	93 70
				3,000 yds.	450 00
Cunningham, Curtiss & Welch, San Francisco.	Aug. 14, 1885	36,000	11 88	116,500	47 87
do	do	20,000	8 00		
do	do	19,000	9 36		
do	do	10,000	4 80		
do	do	11,000	5 83		
A. L. Bancroft & Co., San Francisco.	Aug. 24, 1885	20,000	8 00		
do	do	1,000	3 00	1,000	13 00
do	do	2,000	9 80	2,000	980 00
Hawley Bros., San Francisco	Aug. 20, 1885	2	3 50	2	3 50
do	do	4	2 00	4	2 00
do	Mar. 1, 1886	500 lbs.	24 25	500 lbs.	24 25
do	do	1,000 lbs.	47 50	1,000 lbs.	47 50
Lewis & Swift, San Francisco.	Sept. 30, 1885	450	729 00	1,710	2,101 50
do	do	60	60 00		
Truckee Lumber Company, San Francisco.	Dec. 15, 1885	450	506 25		
do	do	150	150 00		
do	Mar. 3, 1886	450	506 25		
do	do	150	150 00		
do	do	1,000 feet.	22 50	1,000 feet.	22 50
Stein, Simon & Co., San Francisco.	Sept. 18, 1885	3,000	35 25	4,700	58 20
do	do	1,700	22 95		
do	Sept. 30, 1885	1,500 yds.	166 87	10,011½ yds.	1,252 05
do	Nov. 18, 1885	8,511½ yds.	1,085 18		
Fred. A. Davis, San Francisco.	Nov. 30, 1885	2	15 00	2	15 00
C. Schenk & Co., San Francisco.	Dec. 21, 1885	3 sets.	13 75	3 sets.	13 75
Pickering & Colescott, Jeffersonville, Ind.	Feb. 17, 1886	2,400	396 00	3,400	621 00

B.—Detailed statement of articles of clothing, equipage, and materials

SAN FRANCISCO, CAL.—Continued.

Articles.	Purchased under contract.			
	Contractor.	Date of contract.	Quantity delivered.	Cost.
Scrubbing-brushes				
Sibley-tent stoves				
Sibley-tent stove-pipe				
Do				
Duck				
Soap				
Yellow ochre				
Chrome-green				
Cylinder grease				
Paint-brushes				
Wire-woven bunk bottoms				
Flour				

JEFFERSONVILLE, IND.

Scrubbing-brushes	Rowland A. Robbins, New York.	May 27, 1885	10,024	\$1,347 23
Blouse lining flannel	B. Y. Pipey & Co., New York.	May 29, 1885	25,003 yds.	5,373 15
Tent pins, 26-inch	C. N. Campbell, Jeffersonville, Ind.	June 8, 1885	3,000	43 47
Tent pins, 24-inch	do	do	12,000	143 76
Tent pins, 20-inch	do	do	50,000	474 50
Tent pins, 16-inch	do	do	125,000	1,123 75
Canton flannel	T. A. Ashburner, Philadelphia, Pa.	June 8, 1885	130,074 yds.	10,926 22
Tent poles, wall	Robert B. Esler, Philadelphia, Pa.	June 11, 1885	1,500 sets.	1,267 49
Tent poles, common	do	do	3,500 sets.	2,253 99
Tent poles, ridge, common	do	do	1,500	465 00
Ax-helves	James Woolworth, Sandusky, Ohio.	June 12, 1885	5,040	625 80
Axes	North Wayne Tool Company, Hallowell, Me.	June 4, 1885	1,350	715 50
Trumpets, with extra mouth-piece	Rudolph Wurlitzer & Bro., Cincinnati, Ohio.	June 20, 1885	400	676 00
Stencils				
Do				
Inking-pads				
Pattern-paper				
Acid, muriatic				
Acid, nitric				
Sibley-tent stove-pipe joint				
Tailors' crayons				

SAINT LOUIS, MO.

Gum camphor				
Do				
Rubber stamps				
Turpentine				
Ammonia				
Hoop-iron				
Lamp-black				
Sealing wax				
Wrapping paper				

purchased by the Quartermaster's Department, &c.—Continued.

SAN FRANCISCO, CAL.—Continued.

Purchased in open market.				Total.	
From whom purchased.	Date of purchase.	Quantity purchased.	Cost.	Quantity.	Cost.
R. W. Simpson, San Francisco	Jan. 20, 1886	1,000	\$225 00	-----	-----
Holbrook, Merrill & Stetson, San Francisco.	Feb. 17, 1886	75	243 75	75	\$243 75
W. W. Montague & Co., San Francisco.	.....do.....	200 joints.	48 00	500 joints.	93 00
.....do.....	May 21, 1886	300 joints.	45 00	-----	-----
Murphy, Grant & Co., San Francisco.	Feb. 24, 1886	540 yds.	121 50	540 yds.	121 50
A. Prow, San Francisco.	Mar. 3, 1886	60 lbs.	4 80	60 lbs.	4 80
Yates & Co., San Francisco.	.....do.....	60 lbs.	3 00	60 lbs.	3 00
.....do.....	.....do.....	10 lbs.	1 30	10 lbs.	1 30
.....do.....	.....do.....	30 lbs.	7 50	30 lbs.	7 50
.....do.....	.....do.....	6	4 50	6	4 50
Pacific Spring and Mattress Company, San Francisco.	Mar. 8, 1886	200	489 00	200	489 00
Hammer, List & Co., San Francisco.	Apr. 20, 1886	200 lbs.	2 75	200 lbs.	2 75

JEFFERSONVILLE, IND.

-----	-----	-----	-----	10,024	\$1,347 23
-----	-----	-----	-----	25,003 yds.	5,373 15
-----	-----	-----	-----	3,000	43 47
-----	-----	-----	-----	12,000	143 76
-----	-----	-----	-----	50,000	474 50
-----	-----	-----	-----	125,000	1,123 75
-----	-----	-----	-----	130,074 yds.	10,926 22
-----	-----	-----	-----	1,500 sets.	1,267 49
-----	-----	-----	-----	3,500 sets.	2,253 99
-----	-----	-----	-----	1,500	465 00
-----	-----	-----	-----	5,040	625 30
Paul J. Field, Philadelphia, Pa.	July 13, 1885	650	\$331 50	2,000	1,047 00
-----	-----	-----	-----	400	676 00
Mercer & Co., Louisville, Ky.	July 24, 1885	21	50	-----	-----
.....do.....	Feb. 3, 1886	6	1 00	10	1 50
.....do.....	July 24, 1885	2	3 00	2	3 00
Chatfield & Wood, Cincinnati, Ohio.	Oct. 15, 1885	97 lbs.	8 73	97 lbs.	8 73
Arthur, Peter & Co., Louisville, Ky.	Dec. 31, 1885	8 ozs.	30	8 ozs.	30
.....do.....	.....do.....	8 ozs.	30	8 ozs.	30
T. J. Lindley, Jeffersonville, Ind.	Jan. 26, 1885	3,000 joints.	287 40	3,000 joints.	287 40
Von Borries & Co., Louisville, Ky.	Sept. 10, 1885	24 boxes.	7 20	24 boxes.	7 20

SAINT LOUIS, MO.

Meyer Bros. & Co., Saint Louis, Mo.	Jan. 5, 1886	20 lbs.	\$4 80	-----	-----
Richardson Drug Company Saint Louis, Mo.	Apr. 10, 1886	20 lbs.	5 30	40 lbs.	\$10 10
Parker, Ritter, Nicholls, Stationary Company, Saint Louis, Mo.	Jan. 9, 1886	11	2 98	11	2 98
Meyer Bros. & Co., Saint Louis, Mo.	Jan. 15, 1886	30 galls.	14 10	30 galls.	14 10
.....do.....	.....do.....	1 gall.	40	1 gall.	40
M. M. Buck & Co., Saint Louis, Mo.	Jan. 18, 1886	1,000 lbs.	36 00	1,000 lbs.	36 00
.....do.....	.....do.....	20 lbs.	70	20 lbs.	70
Baxter and Skinner Stationery Company, Saint Louis, Mo.	Jan. 28, 1886	50 lbs.	14 50	50 lbs.	14 50
.....do.....	Apr. 6, 1886	2 reams	10 00	2 reams	10 00

REPORT OF THE SECRETARY OF WAR.

B.—Detailed statement of articles of clothing, equipage, and materials

NEW YORK, N. Y.

Articles.	Purchased under contract.			
	Contractor.	Date of contract.	Quantity delivered.	Cost.
Camp stools	Charles H. Pleasants, New York.	Sept. 4, 1885	100	\$52 00
Wire-woven bunk bottoms.	Hartford Woven Wire Mattress Company, Hartford Conn.	Oct. 29, 1885	491	756 14
Do	do	do	509	783 86
Crepe				
Soldiers' huts (Decker felt tents).				
Do				

DIVISION OF THE MISSOURI.

Axes				
Ax and helve				
Ax handles				
Ax helves				
Camphor	L. Orinsky, San Antonio, Tex.	Nov. 28, 1885	20 lbs	\$5 60
Cashmere, black				
Crepe				
Thread				
Wire-woven bunk bottoms.	Union Wire Mattress Company, Chicago, Ill.	Oct. 1, 1885	1,000	2,330 00
Do	Carlton Spring Bed Company, Chicago, Ill.	Dec. 4, 1885	500	1,065 00
Do	do	Mar. 9, 1886	287	717 50
Do	Union Wire Mattress Company, Chicago, Ill.	do	213	553 80

DIVISION OF THE ATLANTIC.

Rope, manila				
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DIVISION OF THE PACIFIC.

Corn brooms	Zan Bros., Portland, Oreg	July 28, 1885	2,000	\$458 33
Rawhides				
Do				
Do				
Do				
Do				
Manta				
Do				
Muslin, unbleached				
Do				
Muslin, bleached				
Cotton cloth				

purchased by the Quartermaster's Department, &c.—Continued.

NEW YORK, N. Y.

Purchased in open market.				Total.	
From whom purchased.	Date of purchase.	Quantity purchased.	Cost.	Quantity.	Cost.
.....	.....	.....	.....	100	\$52 00
.....
E. J. Denning, & Co., New York.	Aug. 11, 1885	26½ yds.	\$26 50	1,000 26½ yds.	1,540 00 26 50
Puggard & Galschiot, Paris, France.	June 28, 1883	2	192 50	.....	.....
do	Feb. 16, 1886	1	92 00	3	284 50

DIVISION OF THE MISSOURI.

Frank H. Winston & Co., Fairview, N. Mex.	Mar. 17, 1886	1	\$1 25	1	\$1 25
Farwell, Ozman and Jackson, Saint Paul, Minn.	Oct. 30, 1885	1	70	1	
Blün & Bro., Fairview, N. Mex.	Mar. 27, 1886	6	2 25	6	2 25
Frank H. Winston & Co., Fairview, N. Mex.	Mar. 17, 1886	6	2 50	6	2 50
Mannheimer Brothers, Saint Paul, Minn.	Aug. 29, 1885	6 yds.	3 00	20 lbs. 6 yds.	5 60 3 00
Sands Brothers, Helena, Mont.	Aug. 5, 1886	10 yds.	10 00	10 yds.	10 00
Subsistence Department, U. S. A., Fort Missoula, Mont.	June 30, 1886	12 spools	69	12 spools	69
.....
.....
.....	.....	.....	.....	2,000	4,666 30

DIVISION OF THE ATLANTIC.

McKenzie, Oertings & Co., Warrington, Fla.	Jan. 11, 1886	38 lbs.	\$5 70	38 lbs.	\$5 70
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DIVISION OF THE PACIFIC.

Horace E. Dunlap, Fort Apache, Ariz.	Nov. 16, 1885	20	\$50 00	2,000	\$458 33
Solomon Wickersham & Co., Bowie Station, Ariz.	July 3, 1885	20	65 00	.....	.....
Brunswick Riggs, Riggs Ranch, Ariz.	Aug. 1, 1885	10	30 00	.....	.....
Solomon Wickersham & Co., Bowie Station, Ariz.	Aug. 6, 1885	20	65 00	.....	.....
B. F. Moore, Lang's Ranch, N. Mex.	Sept. 20, 1885	7	10 50	77	220 50
S. R. DeLong, Fort Bowie, Ariz.	July 26, 1885	75 yds.	7 50	.....	.....
Thos. Chattman, Fort Bowie, Ariz.	Mar. 15, 1886	50 yds.	5 00	125 yds.	12 50
S. R. DeLong, Fort Bowie, Ariz.	July 26, 1885	66 yds.	6 60	.....	.....
Thos. Chattman, Fort Bowie, Ariz.	Feb. 17, 1886	200 yds.	20 00	266 yds.	26 60
S. R. DeLong, Fort Bowie, Ariz.	July 26, 1885	250 yds.	12 50	250 yds.	12 50
Do	Sept. 25, 1886	256 yds.	25 60	256 yds.	25 60

C.—Statement of amounts received and remitted by the Quartermaster's Department on account of clothing and equipage during the fiscal year ending June 30, 1886.

Appropriated by Congress.....	\$1,250,000 00	Remitted for purchase and manufacture of clothing and equipage	\$1 323,664 23
Deposited in Treasury to credit of appropriation for clothing and equipage	73,982 69	Balance in Treasury and due on contracts not yet complete.....	318 46
Total	1,323,982 69	Total	1,323,982 69

D.—Statement showing remittances on account of clothing and equipage during the fiscal year ending June 30, 1886.

Department of the East.....	\$48 68
Division of the Missouri	4,617 80
Department of the Missouri.....	6 00
Department of Dakota	850 00
Department of the Platte	20 00
Department of Texas	5 60
Department of the Columbia	453 33
Depot at Philadelphia, Pa	604,245 03
Depot at New York, N. Y.	1,716 50
Depot at Jeffersonville, Ind	86,251 39
Depot at San Francisco, Cal	343,215 34
Depot at Saint Louis, Mo	12,313 09
Columbus Barracks, Ohio	5 00
Jefferson Barracks, Mo	4,038 75
Willetts Point, N. Y.	57 00
Military Prison, Fort Leavenworth, Kans	260,815 72
Total	1,323,664 23

E.—Statement showing articles of clothing and equipage transferred to the Signal Corps of the Army, during the fiscal year ending June 30, 1886; also, money value of the property.

Articles.	No.	Cost.	Articles.	No.	Cost.
Forage caps..... number..	14	\$7 00	Trousers—Continued.		
Overcoats.....do.....	4	34 80	Canvas.....pairs..	100	\$85 00
Uniform coats.....do.....	9	36 22	Stripes for trousers:		
Gold-lace chevrons:			Sergeants.....do.....	100	28 00
Sergeants.....pairs..	20	51 40	Corporals.....do.....	50	9 50
Corporals.....do.....	10	18 90	Suspenders.....do.....	100	17 00
Service, peace and war..do.....	140	84 00	D. B. flannel shirts.....number..	100	225 00
Cloth chevrons:			Drawers.....pairs..	100	56 00
Sergeants.....do.....	120	48 00	Cotton stockings.....do.....	320	32 00
Corporals.....do.....	50	16 00	Berlin gloves.....do.....	104	12 48
Chevron devices.....number..	646	180 88	Brass-screwed shoes.....do.....	53	93 27
Blouses:			"Post" shoes.....do.....	103	314 15
Made.....do.....	115	333 90	Woolen blankets.....number..	53	180 20
Unmade.....do.....	100	243 00	Flag halliards.....do.....	2	6 16
Blouses.....do.....	8	8 00	Post flag.....do.....	1	10 70
Blouses, canvas.....do.....	50	44 50	Storm and recruiting flags..do.....	2	5 90
Trousers:			Total.....		2,621 76
Foot, made, heavy.....pairs..	113	287 80			
Foot, unmade, light....do.....	200	352 00			

F.—Statement showing articles of clothing and equipage manufactured at the Military Prison, Fort Leavenworth, Kans., for the Quartermaster's Department, during the fiscal year ending June 30, 1886; also, cost of materials, labor, &c.

Articles.	No. made.	Material.	Civilian labor.	Prison labor.	Royalty on machinery.	Total.
Boots:						
Brass-screwed pairs..	6,997	\$17,396 74	\$396 57	\$1,804 92	\$35 06	\$19,633 29
Brass-screwed cavalry do....	2,143	7,352 68	123 55	571 00	10 75	8,057 98
Sewed cavalry do.....	12,604	45,428 90	711 77	6,266 90	566 15	52,973 72
Shoes:						
Brass-screwed do.....	12	20 10	67	3 67	10	24 54
Brass-screwed, "Post" do....	1	1 56	13	50		2 19
Sewed, "Post" do.....	26,778	70,870 65	1,507 13	7,359 88	1,197 88	80,935 54
Sewed, "Field" do.....	93	196 74	5 18	19 50	4 09	225 51
Sewed, "Campaign" do.....	30,981	69,789 41	1,756 89	9,139 13	1,391 23	82,076 66
Brass-screwed, "Campaign" do.....	5,221	11,614 11	298 11	1,025 50	25 48	12,963 20
Barrack chairs number..	3,500	4,106 63		632 50		4,739 13
Corn brooms do.....	27,258	4,320 25		1,814 00		6,143 25
Total		231 106 77	4,800 00	28,637 50	3,230 74	267,775 01

Value of scrap-leather sold during the fiscal year on account of boots \$1,444 20
 Value of scrap-leather sold during the fiscal year on account of shoes 4,197 63

Average cost of—	Prison labor.	Material, royalty, and civilian labor.	Total.
Boots:			
Brass-screwed per pair..	\$0 26	\$2 55	\$2 81
Brass-screwed cavalry do....	26	3 49	3 75
Sewed cavalry do.....	49	3 71	4 20
Shoes:			
Brass-screwed do.....	30	1 74	2 04
Brass-screwed, "Post" do....	50	1 69	2 19
Sewed, "Post" do.....	27	2 75	3 02
Sewed, "Field" do.....	21	2 22	2 43
Sewed, "Campaign" do.....	30	2 35	2 65
Brass-screwed, "Campaign" do....	19	2 29	2 48
Barrack chairs each....	18	1 17	1 35
Corn brooms do.....	07	16	23

G.—Statement showing value of labor performed for the Quartermaster's Department by the Military Prison at Fort Leavenworth, Kans., during the fiscal year ending June 30, 1886.

	Day's work.	Per diem.	Total.
General work	17,838	\$0 35	\$6,243 30
Making—			
Boots and shoes	52,832	50	26,191 00
Corn brooms	3,704	50	1,852 00
Barrack chairs	1,254	50	627 00
Harness	4,431	50	2,215 50
Tin and iron ware	2,735	50	1,367 50
Boxes and crates	1,661	50	830 50
Broom handles	211	50	105 50
Die blocks for boot and shoe factory	22	50	16 00
Mess tables and benches	281	50	140 50
Regimental desks	15	50	7 50
Crimping-forms	33	50	16 50
Cutting-blocks	65	50	32 50
Chair-bolts	60	50	30 00
Stable-brooms	266	50	133 00
Saddle-trees	2	50	1 00
Stencil-chest and bench	6	50	3 00
Tables, &c., for shoe factory	40	50	23 00
Total			39,835 30

H.—Statement showing articles of clothing and equipage issued to the Military Prison at Fort Leavenworth, Kans., during the fiscal year ending June 30, 1886, and money value of the property.

Articles.	Quantity.	Condition.	Price.	Amount.
Boots, brass-screwed	291	New	\$2 73	\$794 43
Shoes, brass-screwed	2	do	1 76	3 52
Boots, sewed	29	do	3 09	115 71
Shoes:				
"Post"	316	do	3 05	963 80
"Field"	60	do	2 73	165 80
"Campaign," sewed	206	do	2 33	490 23
"Campaign," brass-screwed	59	do	2 48	146 32
Total				2,677 86

I.—Statement showing articles of quartermaster's stores issued to the Military Prison at Fort Leavenworth, Kans., during the fiscal year ending June 30, 1886, and money value of the property.

Articles.	Quantity.	Amount.
Stoves:		
Cooking	2	\$60 00
Heating	12	193 80
Wash-boilers	2	2 30
Bulge pots	2	1 36
Straight pots	2	1 16
Bake-pans:		
Large	2	26
Small	4	36
Ironing-pans	2	76
Skillets	2	72
Frying-pans	2	72
Tea-kettles	2	1 70
Grate rests	204	10 20
Total		273 34

K.—Statement showing average prices at which the various articles of clothing and equipage are charged to the Army of the United States, from July 1, 1886, to June 30, 1887.

Articles.	Cost.	Articles.	Cost.
Helmet, without trimmings	\$1 22	Letters, brass	\$0 01
Helmet, hair plumes	38	Numbers, brass	01
Helmet, cord and band	44	Overcoat, kersey:	
Helmet, top piece or base	02	Made	10 20
Helmet, socket for plume	16	Unmade	8 20
Helmet, spike	07	Uniform dress coats:	
Helmet, eagle	04	Non-commissioned officers, fine qual-	
Helmet, scroll and rings	02	ity, made, staff	8 38
Helmet, side buttons	01	Non-commissioned officers, fine qual-	
Helmet, device for shield of eagle	02	ity, made, foot	8 34
Helmet, number, white metal	01	Non-commissioned officers, fine qual-	
Helmet, cork	39	ity, made, mounted	8 06
Fatigue or campaign hat:		Non-commissioned officers, fine qual-	
Black, wool	65	ity, unmade, staff	4 88
Drab, fur	1 20	Non-commissioned officers, fine qual-	
Cord and tassel	07	ity, unmade, foot	4 84
Forage cap	52	Non-commissioned officers, fine qual-	
Forage cap, crossed sabers	02	ity, unmade, mounted	4 56
Forage cap, crossed cannon	02	Musicians, made, engineers'	8 30
Forage cap, crossed rifles	02	Musicians, made, foot	8 26
Forage cap, shell and frame	02	Musicians, made, mounted	7 99
Forage cap, bugle	02	Musicians, unmade, engineers'	4 80
Forage cap, castle	02	Musicians, unmade, foot	4 76
Forage cap, crossed pen and key	02	Musicians, unmade, mounted	4 49
Forage cap, caduceus	02	Privates, made, ordnance and engi-	
Forage cap, wreaths	03	neers	7 71
Fur cap (if on hand)	1 15	Privates, made, foot	7 67

K.—Statement showing average prices at which the various articles of clothing and equipage are charged to the Army, &c.—Continued.

Articles.	Cost.	Articles.	Cost.
Uniform dress coats—Continued:		Chevron, gold lace—Continued:	
Privates, made, mounted.....each..	\$7 41	Sergeant majors.....each..	\$4 38
Privates, unmade, ordnance and engineers.....do.....	4 71	Quartermaster sergeants, engineers, per pair.....	3 40
Privates, unmade, foot.....do.....	4 67	Quartermaster sergeants, artillery, infantry, cavalry, and Signal Corps, per pair.....	4 23
Privates, unmade, mounted.....do.....	4 41	Chief trumpeter's.....do.....	3 79
Blouse:		Principal musicians.....do.....	3 48
Fine quality for non-commissioned officers, made.....do.....	4 35	Saddler sergeants.....do.....	3 79
Fine quality for non-commissioned officers, unmade.....do.....	3 35	Color and first sergeants.....do.....	3 28
Musicians and privates, made.....do.....	3 37	Sergeants.....do.....	2 29
Musicians and privates, unmade.....do.....	2 62	Corporals.....do.....	1 74
Stable frock.....do.....	47	Stripes for trousers:	
Overalls:		Non-commissioned staff.....do.....	23
Engineers.....per pair.....	1 16	Sergeants, engineers.....do.....	29
Mounted.....do.....	39	Sergeant's, infantry.....do.....	21
Trousers:		Sergeant's, ordnance, artillery, cavalry, and Signal Corps.....per pair.....	18
Non-commissioned officers, fine quality, made, staff and foot.....do.....	3 07	Corporal's, engineers.....do.....	22
Non-commissioned officers, fine quality, made, mounted.....do.....	4 40	Corporal's, infantry.....do.....	13
Non-commissioned officers, unmade, staff and foot.....do.....	2 67	Corporal's, ordnance, artillery, cavalry, and Signal Corps.....per pair.....	11
Non-commissioned officers, unmade, mounted.....do.....	3 15	Musician's, engineers.....do.....	44
Privates and musicians, heavy, made, foot.....do.....	2 98	Musician's, infantry.....do.....	26
Privates and musicians, heavy, made, mounted.....do.....	3 62	Musician's, artillery, cavalry, and Signal Corps.....per pair.....	22
Privates and musicians, heavy, unmade, foot.....do.....	2 23	Facings for uniform coats, including silk:	
Privates and musicians, heavy, unmade, mounted.....do.....	2 02	Non-commissioned staff, ordnance, and engineers.....per set.....	52
Privates and musicians, light, made, foot.....do.....	2 06	Heavy artillery, and infantry.....do.....	48
Privates and musicians, light, made, mounted.....do.....	3 26	Light, artillery, cavalry, and Signal Corps.....per set.....	54
Privates and musicians, light, unmade, foot.....do.....	1 91	Brassards.....each.....	27
Privates and musicians, light, unmade, mounted.....do.....	2 26	Chevrons, gold lace, service, peace, or war.....per pair.....	55
Suspenders.....do.....	17	Canvas caps or hoods, blanket-lined.....each.....	1 36
Shirts, dark-blue flannel:		Canvas fatigue coats.....do.....	92
Made.....each.....	2 20	Canvas fatigue trousers.....per pair.....	74
Unmade.....do.....	1 95	Canvas mittens.....do.....	12
Knit undershirt.....do.....	49	Poncho, rubber.....each.....	1 55
Drawers.....per pair.....	46	Blanket, rubber.....do.....	1 13
Stockings:		Dark-blue cloth, $\frac{1}{2}$, Army standard, per yard.....	1 99
Woolen.....do.....	28	Dark-blue blouse flannel, $\frac{1}{2}$, Army standard.....per yard.....	1 16
Cotton.....do.....	09	Dark-blue shirting flannel, $\frac{1}{2}$, Army standard.....per yard.....	94
Berlin gloves.....do.....	11	Sky-blue kersey:	
Gauntlets:		Light, $\frac{1}{2}$, Army standard.....do.....	1 27
Leather.....do.....	1 21	Heavy, $\frac{1}{2}$, Army standard.....do.....	1 52
Fur.....do.....	1 44	Canton flannel, $\frac{1}{2}$.....do.....	08
Mittens, woolen.....do.....	26	Blouse lining flannel, $\frac{1}{2}$.....do.....	23
Boots:		Dark-blue cloth, $\frac{1}{2}$, fine quality.....do.....	2 09
Sewed.....do.....	4 21	Dark-blue flannel, $\frac{1}{2}$, fine quality.....do.....	1 62
Brass screwed.....do.....	2 73	Sky-blue kersey, $\frac{1}{2}$, fine quality.....do.....	1 82
Shoes:		Aiguillettes and shoulder-knots for bandsmen.....per set.....	1 28
Post, sewed.....do.....	3 04	White linen trousers for bandsmen, per pair.....	1 10
Campaign, sewed.....do.....	2 67	Lyres for helmets or forage caps for bandsmen.....each.....	02
Field, sewed.....do.....	2 50	Music pouches, large or small, for bandsmen.....each.....	5 55
Brass screwed.....do.....	1 76	Iron bunk, without slats or bunk bottoms.....each.....	3 58
Arctic overshoes.....do.....	2 75	Wire-woven bunk bottoms:	
Blanket, woolen.....each.....	3 84	With supporting springs.....do.....	3 19
Chevrons, cloth:		Without supporting springs.....do.....	2 48
Post quartermastersergeants per pair.....	2 26	Mattresses.....do.....	2 05
Hospital stewards.....do.....	87	Mattress covers.....do.....	65
Ordnance sergeants.....do.....	69	Pillows.....do.....	29
Commissary sergeants.....do.....	69	Pillow-cases.....do.....	09
Color and first sergeants.....do.....	69	Bed-sheets.....do.....	26
Sergeants.....do.....	38	Bed-sack.....do.....	56
Corporals.....do.....	30	Pillow-sack.....do.....	16
Pioneers and farriers.....do.....	72	Barrack-bag.....do.....	49
Chevron, device for Signal Corps.....do.....	28	Mosquito-bar.....do.....	90
Chevron, gold lace:		Iron pot.....do.....	1 50
Ordnance sergeants.....do.....	4 04	Caup-kettle.....do.....	38
Commissary sergeants.....do.....	3 39	Mess-pan.....do.....	25
Post quartermaster sergeants.....do.....	4 25		
Hospital stewards.....do.....	1 55		

K.—Statement showing average prices at which the various articles of clothing and equipage are charged to the Army, &c.—Continued.

Articles.	Cost.	Articles.	Cost.
Ax each	\$0 55	Tent, hospital, complete each	\$41 38
Ax-helve do	17	Tent, wall do	13 18
Ax-sling do	31	Tent-fly, wall do	4 51
Hatchet do	40	Tent-poles, wall set	1 25
Hatchet-helve do	02	Tent-pins, wall do	70
Hatchet-sling do	24	Tent, wall, complete each	19 64
Spade do	48	Tent, common, closed corners do	6 12
Shovel, short handle do	43	Tent, common, laced corners do	9 27
Shovel, long handle each	53	Tent-poles, common set	1 00
Pickax do	63	Tent-pins, common do	32
Pickax-helve do	07	Tent, common, closed corners, complete, each	9 44
Drum, complete, plain shell do	6 20	Tent, common, laced corners, complete, do	10 59
Drum, complete, polished shell do	7 25	Tent, shelter, each half do	1 00
Drumhead, batter do	52	Tent-poles, shelter set	08
Drumhead, snare do	38	Tent-pins, shelter do	12
Drumslings do	49	Tent, shelter, complete each	2 20
Drumsticks per pair	11	Tent-pins, hospital, large or small do	03
Drumsticks, carriage each	23	Tent-pins, wall, large do	03
Drum-snare per set	11	Tent-pins, wall, small or common do	02
Drum-rod each	30	Tent-pins, shelter do	02
Drum-case do	29	Tent-stove, Sibley or conical do	1 75
Trumpet, with extra mouth-piece do	1 69	Tent-stovepipe, Sibley or conical joints, each	10
Trumpet-cord and tassels do	45	Flag:	
Trumpet crook do	44	Garrison do	29 50
Trumpet, extra mouth-piece do	25	Post do	9 95
Fife, B or C do	17	Storm and recruiting do	2 75
Books:		Flag halyards:	
Company order do	1 50	Garrison and post do	2 30
Company letter, received do	2 40	Recruiting do	28
Company letter, received (index) do	1 40	Colors:	
Company letter, sent do	2 25	National do	69 00
Company letter, sent (index) do	1 40	Regimental do	132 50
Regimental order do	2 05	Standard do	55 00
Regimental letter, received do	2 10	Guidon:	
Regimental letter, received (index), each	70	Cavalry do	6 75
Regimental letter, sent each	2 00	Artillery do	11 87
Regimental letter, sent (index) do	70	Guide, regimental, general do	7 20
Post order do	5 50	Marker do	8 18
Post-letter, received do	5 73	Color belt and sling do	2 38
Post-letter, received (index) do	1 40	Camp color do	1 37
Post-letter, sent do	5 55	Company marking stamp do	1 84
Post-letter, sent (index) do	1 40	Stencil plates set	1 05
Tent, conical wall, complete do	26 51	Scrubbing-brush each	14
Tent, Sibley do	18 28	Corn-broom do	24
Tent-pole, conical wall or Sibley do	98	Barrack chair, rawhide seat do	1 30
Tent tripod do	2 25	Shoe file do	25
Tent-pins, conical wall or Sibley set	45	Card-holder for bunks do	01
Tent, Sibley, complete each	21 96	Buffalo overcoat do	12 95
Tent, hospital do	27 21	Canvas overcoat, blanket-lined do	8 96
Tent-fly, hospital do	8 99		
Tent-poles, hospital set	8 90		
Tent-pins, hospital do	1 28		

L.—Statement showing amount of money realized at the general depots of the Quartermaster's Department and at the Military Prison at Fort Leavenworth, Kans., from sales of clothing, equipage, materials, cuttings, and scrap leather, at auction, &c., which amount has been covered into the Treasury of the United States, to the credit of miscellaneous receipts, during the fiscal year ending June 30, 1886; also expenses connected with said sales which were paid from appropriation for clothing and equipage.

Place of sale.	Amount realized from sales.	Expenses of sales.
Philadelphia, Pa., depot.....	\$29,788 79	\$113 90
Jeffersonville, Ind., depot.....	11,153 36	169 96
San Francisco, Cal., depot.....	881 56	
Saint Louis, Mo., depot.....	15,933 81	42 55
Military Prison at Fort Leavenworth, Kans.....	5,641 83	
Total	63,398 85	326 41

9.—*Report of Lieut. Col. R. N. Batchelder, deputy quartermaster-general, U. S. A., relating to the care and maintenance of national military cemeteries during the fiscal year ending June 30, 1886.*

OFFICE OF NATIONAL CEMETERIES,
Washington, D. C., September 14, 1886.

GENERAL: I have the honor to submit the following report of affairs pertaining to the care and maintenance of the national military cemeteries for the fiscal year ending June 30, 1886.

There were eighty-two national cemeteries at the close of the last fiscal year, and the number remains the same, no changes having been made during the year.

On the 1st of July, 1885, there were seventy-one superintendents in service. During the year four were appointed and two discharged, leaving seventy-three, the number allowed by law, in service June 30, 1886.

The total number of interments in the national cemeteries at the close of the year was 323,947—known, 175,395; unknown, 148,552.

Removals were made during the year from abandoned and other post cemeteries to the national cemeteries as follows: From Governor's Island to the Cypress Hills Cemetery, and from Forts Dodge and Wallace, Kansas, and Forts Bascom, Craig, and McRea, New Mexico, to the Fort Leavenworth Cemetery.

The work under contracts of S. G. Bridges and D. W. Whitney, for furnishing headstones for soldiers' graves in private, village, and city cemeteries, has been closed, and final accounts thereunder submitted to the Treasury for settlement.

The appropriation for this work having been exhausted, and as no new appropriation was made therefor, the Department has been unable to supply those for which applications were received during the year. In the appropriations for the present year, however, provision is made for continuing the supply of these stones, and proposals have accordingly been invited for furnishing such as may be required to the 30th of June, 1887.

Of the appropriation for construction of a macadamized road to the Springfield (Mo.) National Cemetery, referred to in last report, there is an unexpended balance of about \$4,000, which will be applied in adding a covering of gravel and in repairs rendered necessary by damages to the work by flood. A contract for this work has just been made.

At the last session of Congress provision was made for the construction of roadways to the Chalmette, Knoxville, and Natchez National Cemeteries, and steps are now being taken preliminary to making contracts for the work. Exclusive of these three, there are now six of these roads, which have been constructed by special authority of Congress, but as no provision has been made for their maintenance some of them have been greatly injured, and in some instances rendered almost useless for want of occasional repairs.

The case of the Vicksburg Cemetery roadway may be cited as an instance where a few hundred dollars, expended from time to time when needed, would have preserved the road and kept it in good order, but it will now require a special appropriation of \$10,000 to restore the work. In the estimate submitted by this office for the ensuing fiscal year an item has been included to provide for the maintenance and repair of these roads, and it is respectfully recommended that the necessity therefor, as a measure of economy, be specially commended to the attention of Congress.

The work of improvements at the San Francisco National Cemetery has been continued. A stone lodge, stone inclosing wall on three sides, and an iron railing, with ornamental iron gateway, on the front have been completed. Piping has been laid for the introduction of water to the lodge and its distribution through the grounds. The interments have been rearranged to conform to the revised plan of the cemetery. An avenue extending from the main entrance around the flagstaff circle has been constructed and the burial sections graded, seeded, and partially planted.

At the Cypress Hills Cemetery the inclosing wall on west and north sides has been completed and a macadamized avenue constructed extending from entrance through the entire grounds.

Brick lodges of new design have been constructed at the London Park and Mound City Cemeteries, and at the latter also a brick outbuilding.

Extensive improvements have been made to drainage at the Memphis Cemetery, and the inclosing wall at the Philadelphia Cemetery has been completed.

Wrought-iron flag-staffs have been furnished for the Arlington, Chattanooga, Loudon Park, Philadelphia, and San Francisco Cemeteries.

With the appropriation of \$4,000 for a monument at Baxter Springs, Kans., a handsome granite structure, with statue of a soldier, has been urnished and erected.

Contracts have just been made for other improvements at the cemeteries, as follows: For construction of rostrums at Cypress Hills, Loudon Park, Little Rock, Memphis, Nashville, and Wilmington; for lodge and outbuilding at Cypress Hills; for outbuilding at Loudon Park, and for extension of inclosing wall at the Fort Leavenworth Cemetery.

A statement showing the expenditures on account of the cemeteries during the year is herewith submitted.

Very respectfully, your obedient servant,

R. N. BATCHELDER,
Deputy Quartermaster-General, U. S. Army,
In charge of National Cemeteries.

THE QUARTERMASTER-GENERAL, U. S. ARMY.

A.—Statement of disbursements of appropriations for national cemeteries during the fiscal year ending June 30, 1886.

Name of cemetery.	Inclosures.			Lodges.		Rent of quarters.	Outhouses (sheds, stables, &c.).	Trees, plants, &c.	Employees.	Drainage.
	Construction.	Repair.	Gates.	Construction.	Repair.					
Alexandria, La.....					\$29 80			\$75 00	\$270 00	
Alexandria, Va.....					8 00				372 84	
Andersonville, Ga.....		\$1 75			85 15			75 00	624 87	
Annapolis, Md.....					28 00		\$32 00	6 09	112 50	
Antietam, Md.....		10 00			18 25			5 72	424 50	
Arlington, Va.....					1,071 75		70 50	105 15	5,820 00	
Balls Bluff, Va.....									12 50	
Barrancas, Fla.....		10 00			128 16			10 00	262 00	
Baton Rouge, La.....		10 00			207 50		10 00		360 00	
Battle Ground, D. C.....					73 40		9 00			
Beaufort, S. C.....					15 50				601 86	
Beverly, N. J.....		15 00			49 50					
Brownsville, Tex.....		25 00						3 00	420 00	
Camp Butler, Ill.....		129 50			8 50		4 00	5 00	205 00	\$976 50
Camp Nelson, Ky.....					12 00				180 00	
Cave Hill, Ky.....					20 92		11 00			
Chalmette, La.....					50 00				1,066 88	
Chattanooga, Tenn.....		151 85			14 65		16 80		2,230 67	
City Point, Va.....			\$6 00		8 00				200 00	9 00
Cold Harbor, Va.....		20 00			5 00					
Corinth, Miss.....					24 90		14 85		779 50	
Crown Hill, Ind.....								11 20		
Culpeper, Va.....					12 20				178 00	
Cypress Hills, N. Y.....	\$6,029 00							70 00	399 00	
Danville, Ky.....									125 00	
Danville, Va.....					8 20				50 00	
Fayetteville, Ark.....		145 00			25 00		2 00		200 00	
Finn's Point, N. J.....		1 25			14 48			5 00		
Florence, S. C.....					24 83			19 55	135 00	19 80
Fort Donelson, Tenn.....		22 27			43 00				88 00	
Fort Gibson, Ind. T.....					34 84			20 00	200 00	
Fort Harrison, Va.....					10 00		1 00			2 00
Fort Leavenworth, Kans.....		4 00			23 50		19 50	5 00	400 00	
Fort McPherson, Nebr.....					10 50				200 00	
Fort Scott, Kans.....					20 00			16 00	200 00	
Fort Smith, Ark.....		25 00			6 00				250 00	

A.—Statement of disbursements of appropriations for national cemeteries during the fiscal year ending June 30, 1886—Continued.

Name of cemetery.	Inclosures.			Lodges.		Rent of quarters.	Outhouses (sheds, stables, &c.).	Trees, plants, &c.	Employees.	Drainage.
	Construction.	Repair.	Gates.	Construction.	Repair.					
Fredericksburg, Va.					\$22 00		\$4 00		\$595 00	
Gettysburg, Pa.		\$2 40			9 85		2 00		458 31	
Glendale, Va.					29 80		39 00		180 00	
Grafton, W. Va.					24 50				347 00	
Hampton, Va.		1 00			25 00		20 00		1,110 00	
Jefferson Barracks, Mo.		18 00			13 75				120 00	
Jefferson City, Mo.										
Keokuk, Iowa					15 00			12 00	186 00	
Knoxville, Tenn.					18 00				92 00	
Lebanon, Ky.									60 00	
Lexington, Ky.									300 00	
Little Rock, Ark.		4 00			123 00		2 50		260 00	\$169 40
Loudon Park, Md.			\$5 88	\$3,309 00	3 00	\$144 00	15 00	56 80	1,218 75	6 50
Marietta, Ga.			24 00		51 65		19 90	21 00	1,314 25	2,581 50
Memphis, Tenn.		71 27			4 25				215 00	
Mexico City, Mex.										
Mill Springs, Ky.					4 50					
Mobile, Ala.					24 86					
Mound City, Ill.		125 00		4,043 58		18 00	727 80	110 00	450 00	
Nashville, Tenn.		1 00			40 00		39 00		1,745 38	
Natchez, Miss.		299 23			25 00		18 00		569 00	
New Albany, Ind.					22 35		10 00		241 25	
New Berno, N. C.		54 95			99 50		10 50		198 50	
Philadelphia, Pa.	\$4,457 13				12 40				803 25	301 41
Pittsburg Landing, Tenn.					24 40				380 00	13 50
Poplar Grove, Va.					6 75				255 50	
Port Hudson, La.					9 20				271 00	
Quincy, Ill.									25 00	
Raleigh, N. C.		12 00			30 00				220 00	
Richmond, Va.		22 61			24 05				362 50	
Sallabury, N. C.					14 50		9 80	20 00	180 00	
San Antonio, Tex.					25 00			20 00	252 50	
San Francisco, Cal.	7,894 32			4,800 00					113 33	21 98
Seven Pines, Va.					28 75					
Soldiers' Home, D. C.			60 00		58 00		1,168 24		972 31	
Springfield, Mo.		100 00			20 00		15 00	150 00	200 00	

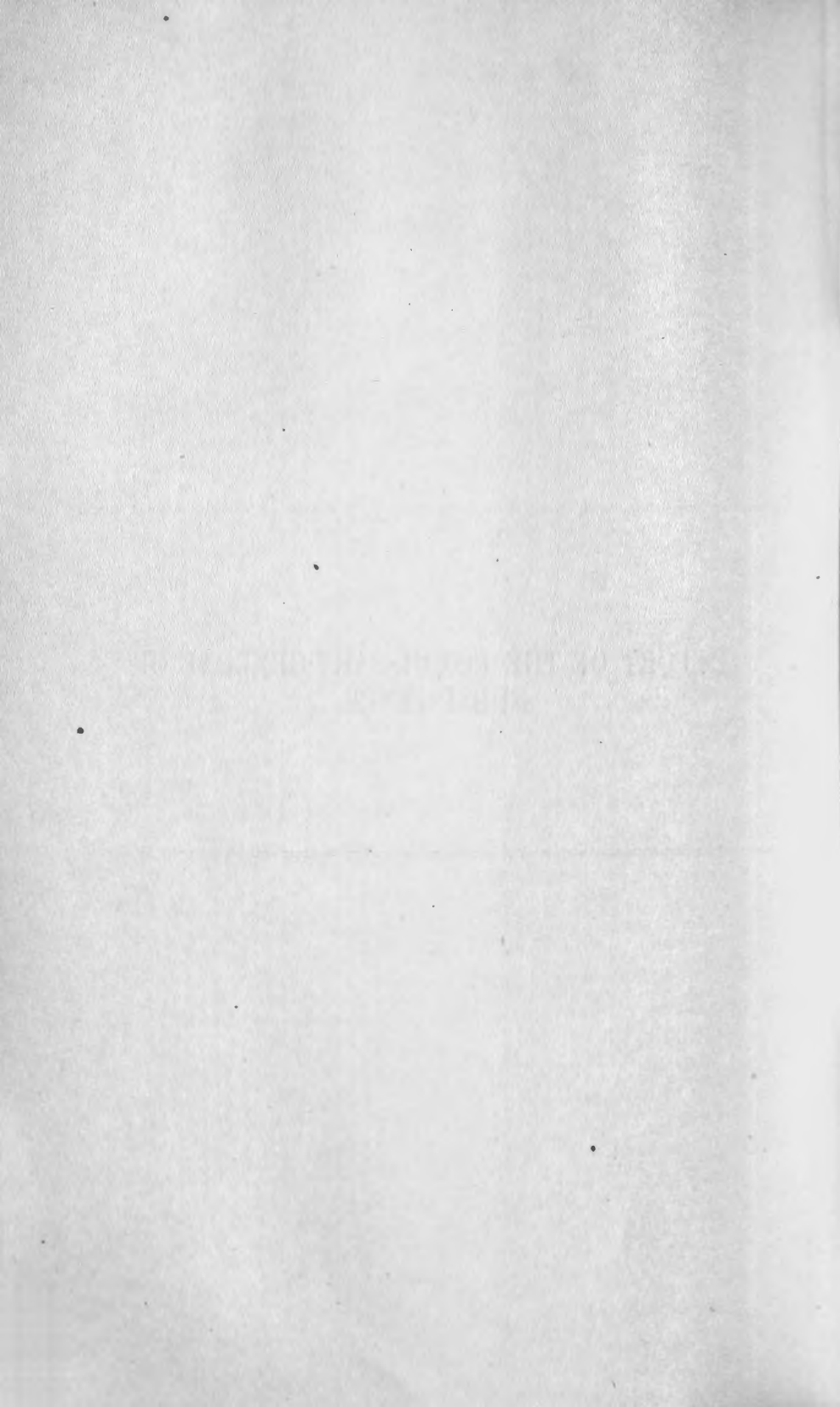
Saint Augustine, Fla										75 00	.....
Staunton, Va						57 95		12 25		48 00	.....
Stone River, Tenn						36 00				563 50	.....
Vicksburg, Miss		920 73						16 04		3, 189 33	219 43
Wilmington, N. C						40 00				86 75	.....
Winchester, Va						1 60				188 25	.....
Woodlawn (Elmira), N. Y										50 00	.....
Yorktown, Va						1 30				52 50	2 00
Soldiers' lots										50 00	.....
Miscellaneous										13, 567 91	.....
Total	17, 880 45	2, 202 81	95 38	13, 152 58	3, 038 44	162 00	2, 304 68	821 51	52, 158 49	4, 323 02	.....

A.—Statement of disbursements of appropriations for national cemeteries during the fiscal year ending June 30, 1886—Continued

Name of cemetery.	Barrack and office furniture.	Tools and miscellaneous stores.	Improvement of grounds.	Flag-staffs and monuments.	Water-supply.	Interments.	Advertising.	Lawn-mowers.	Total.
Alexandria, La.		\$67 30	\$193 50	\$11 05					\$646 65
Alexandria, Va.		9 87			\$25 00				415 68
Andersonville, Ga.		31 94	350 84	8 10					1,177 65
Annapolis, Md.		43 36	60 00						281 95
Antietam, Md.		7 10	125 85	15 40	6 75				614 57
Arlington, Va.		475 90	350 32	312 50					8,207 12
Balls Bluff, Va.									12 50
Barrancas, Fla.		243 03	64 40	5 00	20 00				743 49
Baton Rouge, La.		30 00	56 00	10 00	50 00				733 50
Battle Ground, D. C.		8 37							90 77
Beaufort, S. C.	\$19 50	366 09	254 00	2 00					1,258 95
Beverly, N. J.	5 00	19 84	32 30		250 00				371 64
Brownsville, Tex.		23 00							470 00
Camp Butler, Ill.	70	42 50		10 00					1,381 70
Camp Nelson, Ky.		9 21				\$5 10			206 31
Cave Hill, Ky.	20 00	5 72		9 00	2 00				68 64
Chalmette, La.		42 36	250 75	9 00		43 25			1,402 24
Chattanooga, Tenn.		51 52	981 02	280 90					3,728 51
City Point, Va.		7 30	40 85			4 00			275 15
Cold Harbor, Va.	2 00	6 20	1 50	1 50					36 20
Corinth, Miss.	18 00	82 58	84 75	9 50					1,014 68
Crown Hill, Ind.									11 20
Culpeper, Va.		14 20	57 00						261 40
Cypress Hills, N. Y.		12 90	6,780 83	300 00		9 00	\$97 20		13,697 93
Danville, Ky.				8 50					133 50
Danville, Va.		20 00	34 50		190 50				303 20
Fayetteville, Ark.		40 00	25 00	10 00					447 00
Finn's Point, N. J.	5 75	8 29	38 00	4 00					76 77
Florence, S. C.	19 80	87 06	99 52	5 00		6 90			307 46
Fort Donelson, Tenn.		46 76	107 25		23 38				420 66
Fort Gibson, Ind. T.		69 56	5 00	15 25					344 65
Fort Harrison, Va.		8 95			2 00				23 95
Fort Leavenworth, Kans.		29 80	10 00	10 00	85				502 15
Fort McPherson, Nebr.		23 35	3 00	8 00	24 00				268 85
Fort Scott, Kans.		41 60	13 00						290 60
Fort Smith, Ark.		75 00	40 00	5 00					401 00
Fredericksburg, Va.		8 03	55 00	11 00					693 03

Gettysburg, Pa.		2 80	48 00	75	9 00				518 86
Glendale, Va.		3 40							17 65
Grafton, W. Va.	8 00	13 45	13 80	5 00					289 05
Hampton, Va.		25 18	25 50	6 00	15 17				443 35
Jefferson Barracks, Mo.		30 00	16 00	5 00	3 05				1,210 05
Jefferson City, Mo.		12 50	24 50	75	15 00				204 50
Keokuk, Iowa.		14 31	20 00	10 00	15 00				59 31
Knoxville, Tenn.		70 96	107 00						390 96
Lebanon, Ky.		30 62			6 00				146 62
Lexington, Ky.				38 00					98 00
Little Rock, Ark.	53 50	50 45	60 00						593 45
Loudon Park, Md.		18 13	121 15	265 00	20 00		26 60		5,422 46
Marietta, Ga.	12 50	236 56	259 50	94 55					1,944 91
Memphis, Tenn.		225 00		10 00	45 00				4,251 27
Mexico City, Mex.		35 00							250 00
Mill Springs, Ky.		29 45			39 00				72 95
Mobile, Ala.		46 60	39 10	149 00	75 00	27 00			361 56
Mound City, Ill.	34 40	99 92	164 40	40 00	55 00		24 70		5,892 80
Nashville, Tenn.		197 17	154 07		124 50				2,301 72
Natchez, Miss.		35 72	50 00	8 45					1,005 40
New Albany, Ind.		22 94	12 25	22 00					330 79
New Berne, N. C.		25 10	80 00	6 00					474 55
Philadelphia, Pa.	44 81	61 39	275 00	265 00	165 00		73 80		6,459 19
Pittsburg Landing, Tenn.		35 00	96 90	10 00					539 80
Poplar Grove, Va.		37 43	18 00	10 00	7 50				835 18
Port Hudson, La.		100 30	106 64	10 00	285 00				782 14
Quincy, Ill.									25 00
Raleigh, N. C.		19 54							281 54
Richmond, Va.		20 55							429 71
Salisbury, N. C.		12 52		10 00					246 82
San Antonio, Tex.					60 00	4 00			361 50
San Francisco, Cal.	46 00		50	265 00	537 67	750 00			13,928 80
Seven Pines, Va.		12 90	4 00						45 65
Soldiers' Home, D. C.		95 10							2,338 65
Springfield, Mo.		90 00	75 00	15 00	7 50				672 50
Saint Augustine, Fla.									75 00
Staunton, Va.		6 00		6 00					130 20
Stone River, Tenn.		42 64			7 00				649 14
Vicksburg, Miss.		37 00	61 87	5 90	66 50				4,516 80
Wilmington, N. C.		71 64			304 06				502 39
Winchester, Va.		16 75	4 88		7 00				218 48
Woodlawn (Elmira), N. Y.			130 60						180 60
Yorktown, Va.		5 25	10 00						71 05
Soldiers' lots		30 00		34 00			98 55		212 55
Miscellaneous								\$1,277 41	14,845 32
Total	289 96	3,928 86	12,183 44	2,351 20	2,471 87	849 25	320 85	1,277 41	115,508 87
Total disbursed during the year									

REPORT OF THE COMMISSARY-GENERAL OF
SUBSISTENCE.



REPORT

OF THE

COMMISSARY-GENERAL OF SUBSISTENCE.

WAR DEPARTMENT,
OFFICE COMMISSARY-GENERAL OF SUBSISTENCE,
Washington, D. C., October 1, 1886.

SIR: I have the honor to submit the following report of the operations of the Subsistence Department for the fiscal year ending June 30, 1886.

RESOURCES AND EXPENDITURES.

The following statement exhibits the aggregate fiscal resources and expenditures of the department for the year mentioned, and the balances at the close of the fiscal year:

RESOURCES.

Amounts in the Treasury to the credit of appropriations of the Subsistence Department on June 30, 1885, as follows:

Subsistence of the Army, 1882 and prior years	\$21 00	
Subsistence of the Army, 1884	469,894 76	
Subsistence of the Army, 1885	13,525 59	
Signal Service subsistence, 1884 .....	.890 69	
Signal Service subsistence, 1885	7,463 18	
Claims for quartermaster's stores and commissary supplies, act July 4, 1864, per act July 5, 1884	269 69	
		\$492,064 91

Amounts to the credit of officers of the Subsistence Department, and of officers doing duty in the Subsistence Department, with the Treasurer, assistant treasurers, and designated depositaries, and in their personal possession, on June 30, 1885, as follows:

Subsistence of the Army, 1883 and prior years	\$3,007 70	
Subsistence of the Army, 1884	2,001 06	
Subsistence of the Army, 1885	462,924 03	
Signal Service subsistence, 1884	12,096 25	
Signal Service subsistence, 1885	9,241 00	
		489,270 04

Amounts refunded to the Treasury near close of fiscal year 1885, but not carried to the credit of the appropriations by June 30, 1885, since covered in as follows:

Subsistence of the Army, 1883 and prior years	\$12 64	
Subsistence of the Army, 1884	14 36	
Subsistence of the Army, 1885	142 32	
		169 32

Amounts appropriated for the Subsistence Department for the fiscal year ending June 30, 1886, as follows:

Subsistence of the Army, 1886, act of March 3, 1885.....	\$1,800,000 00	
Signal Service subsistence, 1886, act of March 3, 1885.....	155,000 00	
Claims for quartermaster's stores and commissary supplies, act July 4, 1864, per private act No. 5, approved February 20, 1886, being portion for commissary supplies.....		11 90
Claims for quartermaster's stores and commissary supplies, act July 4, 1864, per act May 17, 1886, being portion for commissary supplies.....	9,116 77	
		<u>\$1,964,128 67</u>

Amounts collected from various sources and refunded to the appropriations of the Subsistence Department on the books of the Treasury during the fiscal year 1886, as follows:

Subsistence of the Army, 1883 and prior years.....	\$808 85	
Subsistence of the Army, 1883 and prior years, transfer account.....	2,586 19	
Subsistence of the Army, 1884.....	185 69	
Subsistence of the Army, 1884, transfer account.....	107 74	
Subsistence of the Army, 1885.....	3,392 59	
Subsistence of the Army, 1886.....	7,902 63	
		<u>14,983 69</u>

Amounts collected from various sources during the fiscal year 1886, in process of cover into the appropriations of the Subsistence Department on June 30, 1886, as follows:

Subsistence of the Army, 1884 and prior years.....	\$1,000 90	
Subsistence of the Army, 1885.....	36 73	
		<u>1,037 63</u>

Amounts received by officers of the Subsistence Department and by officers doing duty in the Subsistence Department from sales of subsistence stores to the following purchasers during the fiscal year 1886, and taken up for immediate disbursement under the following appropriations:

Subsistence of the Army, 1885:		
Sales to officers and enlisted men not previously reported.....	\$137 46	
Subsistence of the Army, 1886:		
Sales to officers, \$367,965.89; to enlisted men and to companies, detachments, and hospitals, \$401,751.40; to civil employes, \$11,238.80; to Fort Leavenworth Military Prison, \$23,914.60; to U. S. Geological Survey, \$1,151.95; to United States surveyors, \$171.97; to Headquarters of the Army, \$7.29; to Indian agents, \$845.48; to physician to Indians, \$240.50; to Quartermaster's Department, \$271.91; to Smithsonian Institution, \$34.80; of condemned stores and property at auction, \$3,241.57; of boxes, barrels, &c., \$345.19; of garden seeds and agricultural implements, \$66.94; total.....	811,248 20	
		<u>811,385 75</u>

Amounts taken up by officers doing duty in the Subsistence Department on account of reclamations for stores lost, damaged, &c., and in correction of errors in their accounts, &c., during the fiscal year 1886:

Subsistence of the Army, 1885.....	\$366 08	
Subsistence of the Army, 1886.....	663 00	
		<u>1,029 08</u>

Amounts in hands of representatives of deceased officers to be collected:

Subsistence of the Army, 1878.....	\$109 84	
Subsistence of the Army, 1882.....	248 63	
Subsistence of the Army, 1883.....	117 99	
		<u>476 46</u>

Amount transferred on books of the Treasury in settlement of deceased officers' accountability during the fiscal year 1886:

Subsistence of the Army, 1883 and prior years, transfer account ..	1,116 24	
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Amount charged against deceased, resigned, and dismissed officers, on account of funds alleged to have been lost by theft, &c., as follows:

Subsistence of the Army, 1879 and prior years.....	3,000 89	
--	----------	--

Amounts charged against officers still in service on account of funds alleged to have been lost by theft, &c., and for which relief can only be obtained in the Court of Claims, under sections 1059 and 1062, Revised Statutes, as follows:

Subsistence of the Army, 1879 and prior years	\$949 71	
Subsistence of the Army, 1880	393 96	
Subsistence of the Army, 1881 and prior years	3,720 65	
Subsistence of the Army, 1882	39 18	
Subsistence of the Army, 1883	109 16	
		\$5,212 66

Amount charged against officers still in service, taken up during the fiscal year, as follows:

Subsistence of the Army, 1885	56 26
-------------------------------------	-------

Total resources	3,783,931 60
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EXPENDITURES.

Amounts expended on the books of the Treasury from the appropriations of the Subsistence Department, during the fiscal year 1886, as follows:

Claims for quartermaster's stores and commissary supplies, act July 4, 1864, per act July 5, 1884	\$269 69	
Claims for quartermaster's stores and commissary supplies, act July 4, 1864, per act February 20, 1886	11 90	
Claims for quartermaster's stores and commissary supplies, act July 4, 1864, per act May 17, 1886	9,116 77	
Signal Service subsistence, 1884	1,906 00	
Signal Service subsistence, 1885	707 23	
Signal Service subsistence, 1886	1,655 62	
Subsistence of the Army, 1882 and prior years	21 00	
Subsistence of the Army, 1883 and prior years, transfer account	568 94	
Subsistence of the Army, 1884	265 74	
Subsistence of the Army, 1885	318 19	
Subsistence of the Army, 1886	540 30	
		\$15,381 38

Amounts disbursed by officers of the Subsistence Department, and officers doing duty in the Subsistence Department, during the fiscal year 1886, as follows:

Subsistence of the Army, 1884	\$20 00	
Subsistence of the Army, 1885	437,731 03	
Subsistence of the Army, 1886	2,094,165 75	
Signal Service subsistence, 1885	8,653 75	
Signal Service subsistence, 1886	128,526 95	
		2,669,097 48

Amounts dropped by officers doing duty in the Subsistence Department in correction of errors in their accounts during the fiscal year 1886:

Subsistence of the Army, 1885	\$1 75	
Subsistence of the Army, 1886	207 99	
		209 74

Amounts transferred on books of Treasury, act March 3, 1875 (18 Stat. L., 418):

Subsistence of the Army, 1883 and prior years, transfer account	\$3,133 49	
Subsistence of the Army, 1884 and prior years, transfer account	107 74	
		3,241 23

Amounts carried to the surplus fund on June 30, 1886:

Subsistence of the Army, 1883 and prior years	\$3,829 19	
Subsistence of the Army, 1884	471,810 13	
Signal Service subsistence, 1884	11,080 94	
		486,720 26

Total expenditures	3,174,650 09
--------------------------	--------------

BALANCES.

Amounts in the Treasury to the credit of appropriations of the Subsistence Department on June 30, 1886, as follows:

Subsistence of the Army, 1885.....	\$37,454 89
Signal Service subsistence, 1885.....	7,343 20
Subsistence of the Army, 1886.....	142,342 24
Signal Service subsistence, 1886.....	12,344 38

\$199,484 71

Amounts to the credit of officers of the Subsistence Department, and of officers doing duty in the Subsistence Department, with the Treasurer, assistant treasurers, and designated depositaries, and in their personal possession, on June 30, 1886, as follows:

Subsistence of the Army, 1885.....	\$5,028 47
Subsistence of the Army, 1886.....	348,812 84
Signal Service subsistence, 1886.....	12,473 05

366,324 36

Amounts refunded to the Treasury near the close of fiscal year, but not carried to the credit of the appropriations by June 30, 1886:

Subsistence of the Army, 1884 and prior years.....	\$1,000 90
Subsistence of the Army, 1885.....	36 73
Subsistence of the Army, 1886.....	33,744 80

34,782 43

Amounts in hands of representatives of deceased officers to be collected:

Subsistence of the Army, 1878.....	\$109 84
Subsistence of the Army, 1882.....	248 63
Subsistence of the Army, 1883.....	117 99

476 46

Amount charged against officers (deceased and resigned) on account of funds alleged to have been lost by theft, &c., as follows:

Subsistence of the Army, 1879 and prior years.....	\$3,000 89
--	------------

3,000 89

Amounts charged against officers still in service on account of funds alleged to have been lost by theft, &c., and for which relief can only be obtained in the Court of Claims, under sections 1059 and 1062, Revised Statutes, as follows:

Subsistence of the Army, 1879 and prior years.....	\$949 71
Subsistence of the Army, 1880.....	393 96
Subsistence of the Army, 1881.....	3,720 65
Subsistence of the Army, 1882.....	39 18
Subsistence of the Army, 1883.....	109 16

5,212 66

Total balances.....609,281 51

Statement of the average contract prices per pound (independent of quantities purchased) in each State and Territory for the fresh beef supply of the Army, in the fiscal year 1886 and 1887.

State or Territory.	Average price per pound.		State or Territory.	Average price per pound.	
	1886.	1887.		1886.	1887.
	<i>Cents.</i>	<i>Cents.</i>		<i>Cents.</i>	<i>Cents.</i>
Maine.....	11.68	9.75	Florida.....	6.75	12.87
Massachusetts.....	10.65	9.63	Alabama.....	10.50	.....
Rhode Island.....	10.50	11.75	Louisiana.....	13.50	8.90
Connecticut.....	8.50	9.00	Arkansas.....	8.00	8.00
New York.....	9.54	9.88	Texas.....	7.16	6.71
Pennsylvania.....	11.75	10.72	Kentucky.....	11.50	7.00
Maryland.....	9.99	6.75	Ohio.....	7.25	5.45
District of Columbia.....	5.99	7.42	Indiana.....	9.40	8.00
Virginia.....	6.83	5.18	Colorado.....	10.08	9.11
Illinois.....	8.50	7.75	Utah.....	6.70	6.94
Michigan.....	8.77	12.87	Montana.....	9.67	8.49
Missouri.....	6.99	6.48	California.....	6.65	6.77
Minnesota.....	6.00	5.44	Arizona.....	10.41	9.07
Nebraska.....	8.00	7.31	Washington Ter'y.....	7.90	7.33
Kansas.....	7.47	7.14	Idaho.....	7.79	7.00
Indian Territory.....	8.52	8.15	Nevada.....	18.50	15.00
Wyoming.....	9.11	8.86	Oregon.....	8.45	7.50
Dakota.....	8.87	8.72			
New Mexico.....	8.82	7.84			
Georgia.....	12.00	7.40	Average price.....	9.15	8.38

During the fiscal year ended June 30, 1886, 271 newspaper advertisements and 479 circulars and posters inviting proposals for subsistence supplies were reported to this office. There were also reported 8,486 contracts of various kinds for fresh meats, complete rations, and other supplies required for the subsistence of the Army.

ISSUES TO INDIANS.

Subsistence supplies were issued, or transferred to the Interior Department for issue, to Indians during the fiscal year ended June 30, 1886, to the following amounts in value :

To W. H. H. Llewellyn, Indian agent at Mescalero Agency, N. Mex.....	\$599 14
To Sioux Indians <i>en route</i> from Cheyenne Agency to and attending United States court at Deadwood, Dak.....	194 89
To destitute Hualpai Indians at Hackberry, Ariz.....	5,001 22
To destitute Indians near Fort Bidwell, Cal.....	508 95
To families of Indian scouts at Fort Supply, Ind. T.....	1,351 81
To Quinn River Pi-Ute Indians at Fort McDermitt, Nev.....	2,980 66
To British Cree Indians at Fort Assiniboine, Mont.....	934 33
To Nez Percé Indians, prisoners of war, at Fort Spokane, Wash.....	1,619 26
To Chiricahua Indians, prisoners of war, at Fort Apache, Fort Bowie, and in the field, Arizona, and at Saint Augustine, Fla.....	23,969 29
To Chiricahua and White Mountain Indians, prisoners of war, at Fort Apache, Ariz.....	653 72
To Chiricahua and Warm Spring Indians, prisoners of war, at San Carlos, Ariz.....	1,983 35
To Indian prisoners of various tribes and at different posts.....	390 70
To Indians visiting posts under Army Regulations 2182 and 2183.....	602 87
To destitute Indians of various tribes and at different posts.....	38 46
Total.....	40,828 65

The sum of \$10,636.67 of the above amount has been transferred by the Interior Department to the credit of the appropriation for Army subsistence.

MISCELLANEOUS ISSUES AND EXPENDITURES.

Issues were made during the fiscal year ended June 30, 1886, under orders from commanding officers, as follows :

	Rations.
To citizen prisoners.....	153
To destitute citizens.....	786
To marines (deserters) in November, 1885, at Fort Sidney, Nebr., and in March, 1886, at Fort Thomas, Ariz.....	39
To 14 prisoners of state (Mexican mutineers), in July to December, 1885, both months inclusive, at camp at Yuma, Ariz.....	2,422

The disbursements for liquid coffee for enlisted men traveling by cars, stages, &c., amount to \$5,504.86, being a decrease from previous year of \$1,278.20.

For extra-duty pay of enlisted men detailed for duty in the subsistence department at posts there was expended \$21,140.79, being an increase over the previous year of \$185.39.

There was disbursed for advertising during the year the sum of \$11,073.02, an increase of \$3,436.68 over the previous fiscal year.

LOSSES OF STORES AND PROPERTY.

The value of stores reported lost in the fiscal year 1886, by accident, wastage in transportation, and while in store, &c., for which no one has

been held accountable, was \$4,714.68, being \$1,535.80 less than losses from like causes in the previous fiscal year.

Stores lost during fiscal year in transportation and responsibility fixed
amounted to \$526 26
Of this amount there has been collected and accounted for 218 65

Balance to be collected 307 61

Value of supplies lost by theft, &c., during the fiscal year ended June 30, 1886.

Where reported.	Cause of loss, per report.	When reported.	Value.
Fort Huachuca, Ariz.	Destroyed or carried off by Indians in Guadalupe Cañon, Ariz.	July, 1885.	\$55 53
Do	Captured and burned by Indians in Guadalupe Cañon, Ariz.	August, 1885.	29 30
In the field, in Arizona and Mexico.	Lost while in pursuit of hostile Indians ..	October, 1885	77 48
Fort Assiniboine, Mont. ...	By theft while in transit.	do	93 45
Fort Gibson, Ind. T.	By theft	do	23 10
Fort D. A. Russell, Wyo.	do	November, 1885 ..	2,598 57
Fort Bowie, Ariz.	By flood in Guadalupe Cañon, Ariz.	December, 1885 ..	105 31
Camp Rice, Tex.	By theft	January, 1886.	5 57
Fort Davis, Tex.	do	March, 1886.	59 66
Fort Bayard, N. Mex.	By fire	do	7 20
Fort Custer, Mont.	do	April, 1886.	8 56
Grand River, Utah.	By swamping of ferry boat.	do	94 85
Total ..... ..	.....	.....	3,158 58

STORES INSPECTED AND CONDEMNED.

Value (original cost) of subsistence stores inspected and condemned during the fiscal year 1886 \$16,783 64
From such as were ordered sold there was realized the sum of 3,147 20

Net loss on account of stores condemned 13,636 44

From sales of condemned subsistence property there was realized the sum of \$94.37.

COOKED RATIONS FOR RECRUITING PARTIES AND RECRUITS AT RENDEZVOUS.

There were disbursed in the fiscal year, \$33,627.11 for the subsistence of recruiting parties and recruits at rendezvous, the number of rations paid for being 65,192 $\frac{3}{4}$, and the average cost per ration 51.58112 cents, an increase of .9059 of a cent per ration over the cost of the previous year.

COMMISSARY SERGEANTS.

Number of commissary sergeants in service at the commencement of the last fiscal year 121
During the year the following casualties occurred:
Discharged 7
Deserted 1
..... 8
..... 113
Appointed during the year 5
..... 118
Total in service June 30, 1886 118

MISCELLANEOUS DIVISION.

There were received and recorded in the miscellaneous division of this office during the year 2,560 communications, and there were written and sent out during the same time 1,624 letters and 1,193 indorsements.

ACCOUNTS AND RETURNS DIVISION.

Accounts and returns on hand June 30, 1885, received, examined, &c., during fiscal year ended June 30, 1886.

On hand June 30, 1885, accounts current.....	333	
Received during year, accounts current	2,492	
	<hr/>	2,825
On hand June 30, 1885, returns of subsistence stores	290	
Received during year, return of subsistence stores.....	2,040	
	<hr/>	2,330
On hand June 30, 1885, returns of subsistence property.....	33	
Received during year, returns of subsistence property.....	796	
	<hr/>	829
Examined during year ended June 30, 1886:		
Accounts current (accompanied by 34,736 vouchers).....		2,307
Returns of subsistence stores (accompanied by 28,455 vouchers).....		1,861
Returns of subsistence property (accompanied by 1,638 vouchers).....		681
On hand June 30, 1886, awaiting examination :		
Accounts current.....		518
Returns of subsistence stores.....		469
Returns of subsistence property		148

The above accounts and returns, received during the year, were rendered by 446 officers.

In connection with the examination of these accounts and returns 3,472 letters were written, 1,407 referred, and 224 papers copied.

In addition 4,377 examinations and reports were made upon applications for certificates of non-indebtedness.

CONTRACT DIVISION.

There were received and recorded in the contract division during the year 2,613 communications, and there were sent out during the same period 1,414 letters and indorsements.

CLAIMS DIVISION.

Act of July 4, 1864 (sec. 300, B, Rev. Stat.).

During the fiscal year ending June 30, 1886, there were received from the Third Auditor of the Treasury and the Quartermaster-General of the Army for examination, under the third section of the act of July 4, 1864, and the acts and joint resolutions supplementary to said act, 25 claims; and, in addition, 7 old claims in which no formal decisions had been rendered were taken up.

Formal decisions were rendered during this period in 31 claims, of which 8, amounting to \$2,753.45, were allowed in the sum of \$339.88, and recommended to the Third Auditor of the Treasury for payment, and 23, amounting to \$10,178.30, were disallowed.

There remained on hand July 1, 1886, awaiting examination and decision, 3 claims of this class.

Joint resolution of July 25, 1866, and third section of act of March 2, 1867.

At the beginning of the fiscal year there were on file in this office 987 claims for commutation of rations to Union soldiers while held as prisoners of war, and during the year 1,476 were received, making a total of 2,463 claims of this class for examination. Of these, 1,251 were partially examined; 1,212 examined and transmitted to the Third Auditor

of the Treasury, of which 655 were recommended for disallowance, and 557, amounting to \$13,969.50, for payment. In addition, 213 old claims were re-examined upon additional evidence, and transmitted to the Third Auditor of the Treasury, of which 164 were recommended for disallowance, and 49, amounting to \$1,408.25, for payment.

Miscellaneous claims.

There were at the beginning of the fiscal year 379 miscellaneous claims on hand, and during the year 341 were received, making a total of 720. Of these, 253 were transmitted to the Third Auditor of the Treasury, of which 125 were recommended for disallowance, and 128, amounting to \$1,605.41, for payment. In addition, 106 old claims were re-examined upon additional evidence and transmitted to the Third Auditor of the Treasury, of which 101 were recommended for disallowance, and 5, amounting to \$62.75, for payment.

Letters and indorsements.

In connection with the three classes of claims mentioned, 13,847 communications were sent out during the year.

ARMY COOKS AND BAKERS.

I have several times heretofore invited attention to the subject of cooks and bakers for the Army, and it is so manifestly a matter of the greatest importance to the health and comfort of the enlisted men individually, and therefore to the efficiency of the Army, that I again recommend that Congress be urged to provide for the enlistment of one cook to each troop, battery, and company, and to each general depot of recruits, and of a baker to each garrisoned post.

That the Army of the United States is provided with a ration, ample in quantity and excellent in quality, has been demonstrated in war as well as in peace; but the articles composing it are furnished in the raw state and must be further prepared by the cook or the baker. Bake ovens, kitchens, ranges, cooking stoves and utensils are now provided by the Government, but no adequate provision has been made for their use in the best manner.

Everything is provided save one, and that one is the skilled hand absolutely necessary to transform the raw materials into good wholesome palatable food, the cook or baker.

DUTIES AND STATIONS OF OFFICERS OF THE SUBSISTENCE DEPARTMENT.

The duties and stations of officers of the Subsistence Department on the 30th day of June, 1886, will appear from the roster hereto appended.

During the year the officers of the department have been actively employed, and have performed their duties with their accustomed zeal, fidelity, and efficiency.

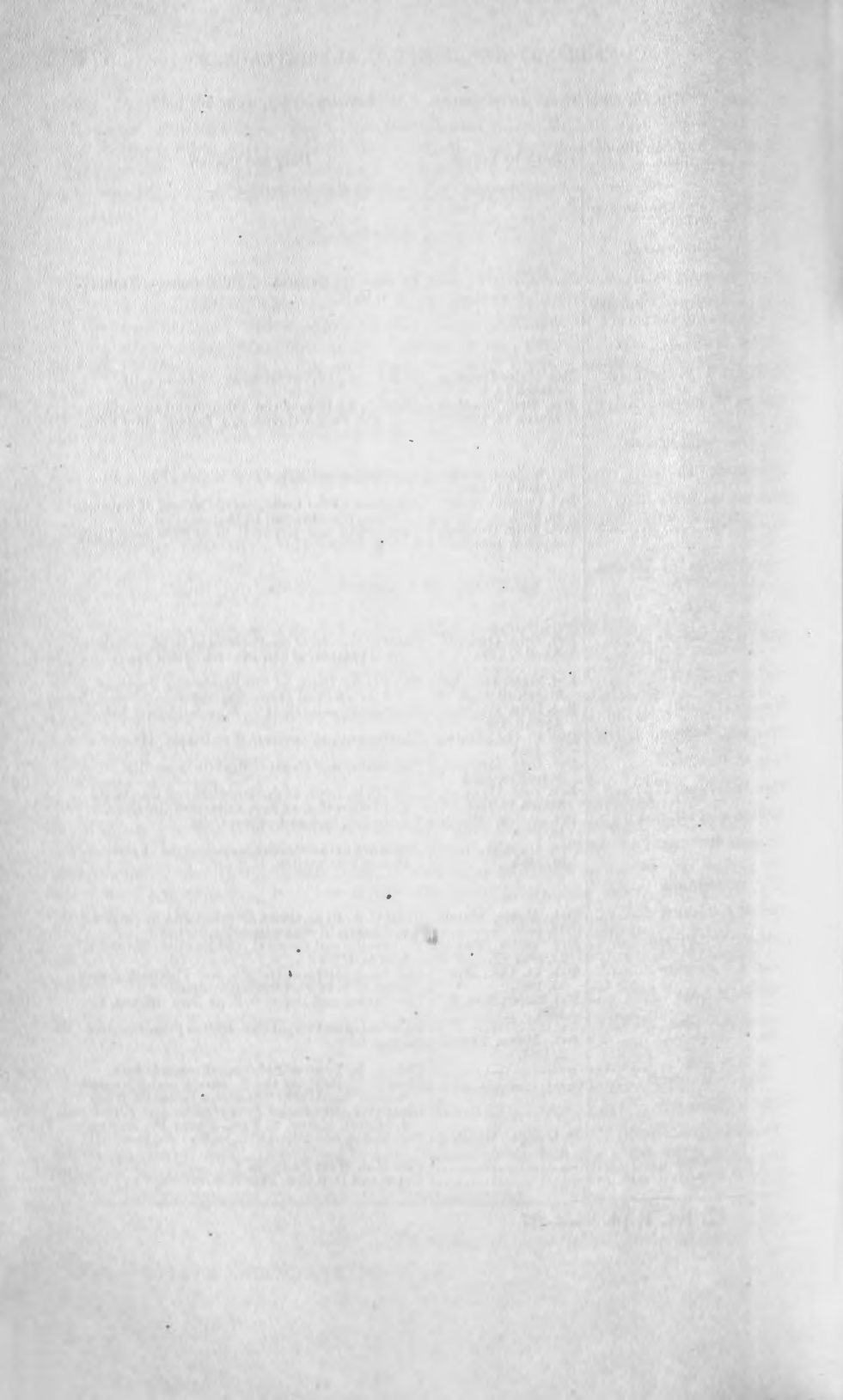
Very respectfully, your obedient servant,

R. MACFEELY,
Commissary-General of Subsistence.

The honorable SECRETARY OF WAR.

Roster of the Subsistence Department, United States Army, June 30. 1886.

Name and rank in the department.	Rank by brevet.	Duty and station.
COMMISSARY-GENERAL OF SUBSISTENCE.		
<i>Brigadier-general.</i>		
Robert Macfeely		Commissary-General of Subsistence.—Washington, D. C.
ASSISTANT COMMISSARIES-GENERAL OF SUBSISTENCE.		
<i>Colonels.</i>		
Marcus D. L. Simpson	Bvt. Major-General, March 13, 1865.	Chief C. S., Div. of Missouri.—Chicago, Ill.
William W. Burns	Bvt. Brig. General, March 13, 1865.	Chief C. S., Div. of the Atlantic and Department of the East.—Governor's Island, New York, N. Y.
<i>Lieutenant-colonels.</i>		
Amos Beckwith	Bvt. Major-General, March 13, 1865.	Purchasing and Depot C. S. at Saint Louis, Mo.
Beekman Du Barry	Bvt. Colonel, March 13, 1865.	Assistant to the Commissary-General of Subsistence.—Washington, D. C.
George Bell	Bvt. Brig. General, April 9, 1865.	Purchasing and Depot C. S. at New York City, N. Y.
COMMISSARIES OF SUBSISTENCE.		
<i>Majors.</i>		
Michael R. Morgan	Bvt. Brig. General, April 9, 1865.	Chief C. S., Div. of the Pacific and Dept. of California.—Presidio of San Francisco, San Francisco, Cal.
John P. Hawkins	Bvt. Major-General, March 13, 1865.	Chief C. S., Dept. of the Platte and Purchasing and Depot C. S. at Omaha, Nebr.
Michael P. Small	Bvt. Brig. General, April 9, 1865.	Purchasing and Depot C. S. at Baltimore, Md.
Thomas C. Sullivan	Bvt. Lt. Col., March 13, 1865.	Purchasing and Depot C. S. at Boston, Mass.
John W. Barriger	Bvt. Brig. General, March 13, 1865.	Purchasing and Depot C. S. at Chicago, Ill.
Thomas Wilson	Bvt. Brig. General, March 13, 1865.	Chief C. S., Dept. of the Missouri, and Purchasing and Depot C. S. at Fort Leavenworth, Kans.
William H. Bell	Bvt. Major, March 13, 1865.	Purchasing C. S. at Denver, Colo.
Jeremiah H. Gilman	Bvt. Lt. Col., Dec. 31, 1862.	Assistant to the Commissary-General of Subsistence.—Washington, D. C.
<i>Captains.</i>		
Samuel T. Cushing	Bvt. Major, March 13, 1865.	Chief C. S., Department of Texas, and Purchasing and Depot C. S. at San Antonio, Tex.
William A. Elderkin	Bvt. Major, March 13, 1865.	Purchasing and Depot C. S. at Newport Barracks, Newport, Ky.
Charles B. Penrose	Bvt. Lt. Col., Nov. 11, 1867.	Chief C. S., Dept. of Dakota, and Purchasing and Dept. C. S. at Fort Snelling, Minn.
William H. Nash	Bvt. Major, Nov. 17, 1865.	Purchasing and Depot C. S. at New Orleans, La.
Charles P. Eagan		Purchasing and Depot C. S. at San Francisco, Cal.
Fred. F. Whitehead	Bvt. Major, March 2, 1867.	On sick leave.
John F. Weston		Chief C. S., Dept. of Arizona.—Prescott, Ariz.
Charles A. Woodruff		Chief C. S., Dept. of the Columbia, and Purchasing and Depot C. S., Vancouver Barracks, Wash.
John J. Clague		Chief C. S., District of New Mexico, and Post C. S. at Fort Marcy, N. Mex.—Santa Fé, N. Mex.
Wells Willard	Bvt. Capt., March 2, 1867.	Purchasing and Depot C. S. at Washington, D. C.
Henry G. Sharpe		Post C. S. West Point, N. Y.
Frank E. Nye		Depot and Post C. S. Fort Monroe, Va.



REPORT OF THE SURGEON-GENERAL.

REPORT OF THE SECRETARY OF THE

REPORT

OF

THE SURGEON-GENERAL.

SURGEON-GENERAL'S OFFICE,
Washington, October 11, 1886.

SIR: I have the honor to submit the following statement of finances and general transactions of the Medical Department of the Army for the fiscal year ending June 30, 1886:

FINANCIAL STATEMENT.

Medical and hospital department, 1882:		
Balance on hand July 1, 1885		\$452 00
Balance to be accounted for July 1, 1886		452 00
Medical and hospital department, 1884:		
Balance on hand July 1, 1885		28,895 44
Refunded during the year		31 88
Total to be accounted for		28,927 32
Disbursed during the year	\$4,448 30	
Transferred to surplus fund	24,479 02	
		28,927 32
Medical and hospital department, 1885:		
Balance on hand July 1, 1885		94,357 96
Refunded during the year:		
By Signal Service Bureau, for supplies furnished...	\$667 68	
By recruiting service, for vaccine virus furnished...	26 00	
By Commissary Department, for board furnished to enlisted men of the Army by parties and hospitals.	69 00	
For medical and hospital supplies lost during transportation	4 50	
		767 18
Total to be accounted for		95,125 14
Disbursed during the year:		
For medical and hospital supplies	\$78,317 25	
For expenses of purveying depots	1,325 38	
For pay of employes	250 00	
For medical attendance, medicines, &c	1,688 40	
For miscellaneous expenses	269 04	
		81,850 07
Balance to be accounted for July 1, 1886		13,275 07
In United States Treasury	\$9,852 13	
In hands of disbursing officers	3,422 94	
		13,275 07

Medical and hospital department, 1886:		
Appropriated by act approved March 3, 1885.....		\$225,000 00
Refunded during the year:		
By Quartermaster's Department, for veterinary medicines furnished.....	\$2,285 55	
By Signal Service Bureau, for medical supplies furnished to Fort Myer, Va.....	516 45	
By Army Medical Museum, for supplies furnished...	250 72	
On account of medical hospital supplies lost during transportation.....	45 00	
		<u>3,097 72</u>
Total to be accounted for.....		228,097 72
Disbursed to June 30, 1886:		
For medical and hospital supplies.....	\$57,743 90	
For expenses of purveying depots.....	4,135 74	
For pay of employes, viz:		
Medical purveying depot, New York, N. Y.....	\$12,428 25	
Medical purveying depot, Saint Louis, Mo.....	12,639 93	
Medical purveying depot, San Francisco.....	5,922 46	
Office medical director Division of the Atlantic.....	1,800 00	
United States Army dispensary, Washington.....	2,750 00	
		<u>35,540 64</u>
For advertising.....	328 00	
For medical attendance, medicines, nursing, &c....	2,240 58	
For miscellaneous expenses.....	932 51	
		<u>100,921 37</u>
Balance to be accounted for July 1, 1886.....		127,176 35
Balance in United States Treasury.....	\$85,774 10	
In hands of disbursing officers.....	41,402 25	
		<u>127,176 35</u>

The balance remaining on hand at the close of the fiscal year has already been, or will be, expended in the payment for supplies contracted for and other obligations incurred prior to July 1, 1886.

Signal Service, Medical Department, 1884:

Balance on hand July 1, 1885:		
Medical attendance and medicines.....		\$739 00
Medical attendance and medicines to officers doing duty in connection with the Signal Service.....		100 00
Medical and hospital supplies at Fort Myer, Va.....		35 16
Medicines to officers and enlisted men from purveying depots and dispensaries.....		99 54
		<u>973 70</u>
Total to be accounted for.....		973 70
Disbursed during the year:		
For medical attendance and medicines.....	\$16 25	
Transferred to surplus fund.....	957 45	
		<u>973 70</u>

Signal Service, Medical Department, 1885:

Balance on hand July 1, 1885:		
Medical attendance and medicines.....		\$3,776 14
Medical attendance and medicines for officers doing duty in connection with the Signal Service.....		97 15
Medical and hospital supplies at Fort Myer, Va.....		415 64
Material for repair of hospital at Fort Myer, Va.....		74 83
Medicines to officers and enlisted men from purveying depots and dispensaries.....		1,000 00
		<u>5,363 76</u>
Total to be accounted for.....		5,363 76

Signal Service, Medical Department, 1885—Continued.

Disbursed during the year:

For medical attendance and medicines.....	\$803 08
For medical and hospital supplies at Fort Myer, Va..	373 58
For material for repair of hospital at Fort Myer, Va..	74 79
For medicines to officers and enlisted men, &c.....	475 74
	<u>\$1,727 19</u>

Balance to be accounted for July 1, 1886..... 3,636 57

Signal Service, Medical Department, 1886:

Appropriated by act approved March 3, 1885:

For medical attendance and medicines.....	5,000 00
For medical attendance and medicines for officers doing duty in connection with the Signal Service.....	100 00
For medical and hospital supplies at Fort Myer, Va.....	700 00
For work and supplies at Fort Myer, Va.....	300 00
For medical and hospital supplies to officers and enlisted men of the Signal Corps and purveying depots and dispensaries.....	1,000 00

Total be accounted for..... 7,100 00

Disbursed during the year:

For medical attendance and medicines.....	\$1,756 10
For medical and hospital supplies at Fort Myer, Va..	516 45
For work and supplies at Fort Myer, Va.....	299 87
	<u>2,572 42</u>

Balance to be accounted for July 1, 1886..... 4,527 58

Artificial limbs, 1884:

Balance from previous fiscal year.....	9,192 69
Disbursed during the year.....	\$344 33
Carried to surplus fund.....	7,405 16
	<u>7,749 49</u>

Balance remaining June 30, 1886..... 1,443 20

Artificial limbs, 1885:

Balance from previous fiscal year.....	9,818 45
Disbursed during the year.....	7,215 94

Balance remaining June 30, 1886..... 2,602 51

Artificial limbs, 1886:

Appropriated by act of March 3, 1885.....	\$400,000 00
Appropriated by act of March 26, 1886.....	175,000 00
Refunded during the year.....	8 25

Total to be accounted for..... 575,008 25

Disbursed during the year..... 475,012 32

Balance remaining June 30, 1886..... 99,995 93

Appliances for disabled soldiers, 1884:

Balance from previous fiscal year.....	1,124 00
Carried to the surplus fund.....	1,124 00

Appliances for disabled soldiers, 1885:

Balance from previous fiscal year.....	1,703 50
Disbursed during the year.....	6 00

Balance remaining June 30, 1886..... 1,697 50

Appliances for disabled soldiers, 1886:

Appropriated by act of March 3, 1885.....	2,000 00
Disbursed during the year.....	341 50

Balance remaining June 30, 1886..... 1,658 50

Medical and Surgical History:	
Balance from previous fiscal year	\$8,488 00
Refunded during the year	226 34
Total to be accounted for	8,714 34
Disbursed during the year	149 12
Balance remaining June 30, 1886	8,565 22
Museum and library, 1885:	
Balance from previous fiscal year	837 75
Disbursed during the year	837 75
Museum and library, 1886:	
Appropriated by act of March 3, 1885	15,000 00
Disbursed during the year	12,560 30
Balance remaining June 30, 1886	2,439 70
Expended in furnishing trusses under sections 1176, 1177, 1178, Revised Statutes	3,968 12

ARTIFICIAL LIMBS AND TRUSSES.

There were furnished during the year:

In kind:	
Trusses	780
Artificial legs	598
Artificial foot	1
Apparatus for legs	2
Arms	22
By commutation:	
Artificial legs	2,652
Artificial feet	59
Artificial arms	3,040
Artificial hands	10
Apparatus for arms	924
Apparatus for legs	645

I would respectfully observe that in carrying out the laws for furnishing trusses some cases are observed in which there is apparent hardship, if not injustice; for instance, a soldier ruptured during the war with Mexico, although he may be receiving a pension on account of hernia, is not entitled to receive a truss. Under the law as it now stands (Secs. 1176, 1177, and 1178, Revised Statutes, and Supplement, p. 450), the following classes of persons are not entitled to trusses: Those who were ruptured at any time while serving as commissioned officers of whatever grade; those who were ruptured prior to April 19, 1861, whether commissioned or enlisted, although the disability may have been incurred in the line of duty and during the prevalence of war; and those who have been ruptured since August 20, 1866, whether commissioned or enlisted, unless the disability may have been incurred in the line of duty during the war.

It is recommended that existing law on this subject be so amended as to correspond with that relating to artificial limbs; that is, to allow a truss, suitable to the disability, to every person who has been, or may hereafter be, ruptured in the line of duty while serving in the Army or Navy. It may be proper to add that the only evidence of rupture in the line of duty accepted by this office is that furnished by the Pension Office, that the applicant is in receipt of a pension (either wholly or in part) on account of hernia.

MEDICAL AND HOSPITAL SUPPLIES.

The money value of the medical and hospital supplies, actually issued during the fiscal year ended June 30, 1886, was \$168,119.06, and the cost of the supplies required for issue during the current year will probably exceed that amount. I base the estimate of the probable cost of the medical and hospital supplies which will be required for issue during present fiscal year on the fact that the average money value of the medical supplies issued annually during the fiscal years July 1, 1876, to June 30, 1886, was approximately \$183,000, exclusive of all other expenses.

In this connection I respectfully invite your attention to my estimate of appropriations required by the Medical Department of the Army for the service of the fiscal year ending June 30, 1888, submitted to you on the 16th instant, as follows:

For the purchase of medicines and hospital supplies, expenses of medical purveying depots, pay of employes, medical care and treatment of officers and enlisted men of the Army on duty at posts and stations for which no other provision is made; for the proper care and treatment of cases in the Army suffering from contagious epidemic diseases; advertising and other miscellaneous expenses of the Medical Department (the amount to be expended for pay of employes not to exceed \$46,000), \$225,000; for the purchase of disinfectants for general post sanitation, \$10,000; for medical and hospital supplies for the Army and Navy General Hospital at Hot Springs, Ark., \$4,000; for the service of the Army and Navy General Hospital, Hot Springs, Ark., including clerk, stewards, cooks, attendants, engineer, laundresses, laborers, watchmen, and other necessary employes, \$14,620; total, \$253,620.

The estimated amounts will, it is believed, be necessary to meet the wants of the Medical Department for the ensuing fiscal year. It becomes necessary, from time to time, to add to the standard supply table new remedies, new instruments, and new standard medical books, and to provide them for use by the medical officers of the Army in the proper diagnosis and treatment of disease.

By direction of the Secretary of War, disinfectants for general use in the Army are estimated for by the Medical Department (heretofore supplied by the Quartermaster's Department).

The limited number of contract surgeons allowed by law necessitates the temporary employment of private physicians, under existing regulations, to furnish medical attendance to officers and enlisted men at stations where there is no medical officer of the Army. These physicians are paid by the visit from the medical and hospital appropriation. Added to this is the necessary expenditure for the employment of skilled nurses for the proper care and treatment of epidemic contagious diseases.

I respectfully recommend, as specified in estimate submitted, that the limit of amount of the appropriation to be expended for pay of employes of the Medical Department be increased to \$46,000. The largely increased amount of clerical labor required for the preparation of contracts and other papers pertaining to same renders necessary an increase of the clerical force at medical purveying depots.

I respectfully recommend, in order to facilitate the purchase and delivery of medical and hospital supplies, and for the best interest of the service with a view to economy, that Congress be requested to grant authority, in the purchase of medical and hospital supplies which cost less than \$500, to make such purchases after due advertisement

for bids, without entering into a formal written contract. In many instances a strict compliance with the letter of the law and existing regulations, in preparing the formal executory contracts, *five copies of which are required*, entails an expense to the Government in clerical time and labor fully equal to the cost of the article for which the contract is made. It is not believed that such was the intention of the framers of the laws relating to purchases of Government supplies.

HEALTH OF THE ARMY.

The medical, surgical, and meteorological statistics of the Army for the calendar year ending December 31, 1885, are respectfully submitted.

The following table shows in brief the more important facts that are to be presented:

† General statistics of the health of the Army for the year.	White.	Colored.	Total.
Average mean strength, as shown on the medical reports, during the year*	21, 944	2, 194	24, 138
Number of admissions to sick report during the year†	29, 689	8, 301	37, 990
Treated in hospital	12, 530	1, 130	13, 660
Treated in quarters or field	17, 169	2, 171	19, 340
Ratio of admissions to 1,000 of mean strength	1, 353	1, 505	1, 367
Ratio for the previous year	1, 509	1, 754	1, 532
Ratio for the preceding decade	1, 692	1, 845	1, 706
Admitted for disease	24, 853	2, 639	26, 992
Ratio per 1,000 of strength	1, 110	1, 203	1, 118
Admitted for injuries	5, 336	662	5, 998
Ratio per 1,000 of strength	243	302	248
Average number constantly sick during the year	898	93	991
Ratio per 1,000 of strength	41	42	41
Ratio for the previous year	44	40	44
Ratio for the preceding decade	44	45	44
Average days of service lost by sickness to each man of the above force during the year	15	15.5	15
Average days of service lost by sickness to each man of the force during the previous year	16	18	16.2
Average days of service lost by sickness to each man of the force during the preceding decade	16.2	16.3	16.2
Average number of days each case was treated	11	10	11
Number of deaths from all causes	168	14	182
Ratio per 1,000 of mean strength ‡	7.7	6.4	7.5
Ratio for the previous year	10.7	13.1	10.9
Ratio for the preceding decade §	12.5	14.8	12.7
Number of deaths from diseases	108	7	115
Number of deaths from injuries	60	7	67
Number of discharges for disability	694	63	757
Ratio per 1,000 of mean strength ‡	32	29	31
Ratio for the previous year	37	31	36
Ratio for the preceding decade §	34	32	34
Number of discharges for disease	633	55	688
Number of discharges for injuries	61	8	69

*The average mean strength of command is based upon the number of troops actually present on each day of the year, with such commands as are provided with medical officers, troops present sick and military prisoners, except such as are discharged from service, being included.

† Indian scouts (two hundred and fifty-two) are not included in this table.

‡ This number includes all cases of disease or injury on account of which officers and enlisted men are excused from any part of their military duty.

§ The death and discharge rates here given are higher than they should be, as they are computed upon the strength of such troops as are provided with medical officers, and not upon the strength of the entire Army, which the report of the General of the Army, under date of June 30, 1885, shows to have been (deducting Indian scouts) 26,542. The true death rate for the year, therefore, was 6.9 per 1,000, and the discharge rate 29 per 1,000 of strength, while the annual rates for the preceding decade were 11.7 deaths per 1,000 of strength and 31 discharges per 1,000 of strength.

The consolidated returns of this office show for the Army a year of exceptional freedom from disease, although it has been one of unusual activity and hardship for troops stationed on the Southwest frontier.

The actual number of admissions to sick report was 3,839 less than for the preceding year, while the ratio of cases to mean strength of com-

mand was considerably lower, being as 1,367 per thousand is to 1,532 per thousand.

Compared with the average rate for ten years preceding, the admissions were about one-fifth less.

The number of cases receiving hospital treatment was 13,650, or 565.5 per thousand of strength. The hospital admissions comprise the more serious cases, and they are the only ones that can be used in making comparisons with the sick rates of the Navy, or with those of the British army. Reports of the former show for the year 1884 an admission rate of 967 per thousand of the force afloat; and of the latter, for troops serving in the United Kingdom (1870-79), 809 per thousand of strength.

It is a matter of congratulation that not only the admission rate for the troops, but also the death-rate, has fallen to a lower point than at any time within the history of the Medical Department.

Comparisons with the ratios of admissions and deaths for all the years of peace since 1839 will show a progressive and apparently permanent improvement in health.

Year.	Ratio of cases of diseases and injuries to 1,000 of strength.	Ratio of deaths to 1,000 of strength.	Ratio of deaths to 1,000 cases treated.	Year.	Ratio of cases of diseases and injuries to 1,000 of strength.	Ratio of deaths to 1,000 of strength.	Ratio of deaths to 1,000 cases treated.	Year.	Ratio of cases of diseases and injuries to 1,000 of strength.	Ratio of deaths to 1,000 of strength.	Ratio of deaths to 1,000 cases treated.
1840.....	2,784	25	9.0	1854.....	3,088	32	10.3	1872.....	1,912	16	8.2
1841.....	3,849	40	10.3	1855.....	3,281	33	10.2	1873.....	1,933	17	8.8
1842.....	3,243	30	9.3	1856.....	3,209	25	7.7	1874.....	1,785	13	7.3
1843.....	2,719	16	6.0	1857.....	2,817	14	4.8	1875.....	1,678	11	6.7
1844.....	2,448	11	4.6	1858.....	2,652	14	5.4	1876.....	1,690	23	13.4
1845.....	2,619	9	3.5	1859.....	2,360	16	6.7	1877.....	1,756	13	7.4
1846.....	2,938	27	9.2	1860.....	2,239	10	4.4	1878.....	1,515	13	8.8
1847.....	(*)	(*)	(*)	Civil war.....	(*)	(*)	(*)	1879.....	1,700	12	7.1
1848.....	(*)	(*)	(*)	1866.....	2,629	65	25.4	1880.....	1,768	11	6.1
1849†.....	3,062	80	26.2	1867.....	3,006	54	17.8	1881.....	1,789	10	5.8
1850.....	2,684	34	12.2	1868.....	2,907	33	11.4	1882.....	1,688	11	6.3
1851.....	2,735	32	11.8	1869.....	2,540	16	6.4	1883.....	1,838	12	6.6
1852.....	2,800	25	8.9	1870.....	2,097	14	6.8	1884.....	1,532	11	7.1
1853.....	2,959	28	9.4	1871.....	2,084	17	8.3	1885.....	1,307	7	5.5

* The years of the war with Mexico and the civil war are omitted.

† Year of the cholera.

‡ An epidemic of small-pox during this year furnished 877 deaths.

§ An epidemic of cholera furnished 1,310 deaths.

|| An epidemic of cholera and yellow fever furnished 681 deaths.

¶ Year of the Custer massacre, in which 247 officers and men were killed on the Little Big Horn River, Dakota.

Losses to the Army from discharges for physical disability have also decidedly decreased, though not to the extent shown by the death-rate.

Arm of service.—The distribution of sickness among troops of the several arms of the service was as follows: The infantry furnished 14,344 admissions, or 1,214 per thousand of its strength; the cavalry, 10,904, or 1,364 per thousand; the artillery, 3,879, or 1,353 per thousand; the ordnance, 655, or 1,348 per thousand; the engineer, 1,200, or 2,210 per thousand.

Length of service.—The influence of length of service in determining liability to sickness among the troops is also of interest, and the following table exhibits, first, the number of men actually in service at the close of the calendar year under each class; second, the number of ad-

missions that have taken place within each class; and, third, the ratio of admissions to strength for each year of service noted:

For the year 1885.

Years of service.	Men in each class.	Admissions to sick report.	Ratio of admission to 1,000 of strength.
First year and under.....	6,205	13,988	2,254
Second year.....	3,632	3,866	1,064
Third year.....	2,645	2,602	984
Fourth year.....	2,249	2,174	967
Fifth year.....	1,053	1,120	1,064
Sixth year.....	1,148	1,034	901
Seventh year.....	897	870	970
Eighth year.....	629	665	1,057
Ninth year.....	738	684	927
Tenth year.....	921	913	991
Twelfth year.....	1,851	1,360	1,007
Fifteenth year and over.....	4,587	3,777	823

Ratio of admissions for all periods of service during the year, 1,367 per 1,000.

Age.—A similar table, showing in quinquennial groups the ages of those admitted to sick-report, and the number serving in each group during the year, is also given:

For the year 1885.

Age.	Men in each class.	Admissions to sick report.	Ratio of admission to 1,000 of strength.
Under sixteen years.....	1	2	2,060
Sixteen to twenty years.....	197	523	2,655
Twenty-one to twenty-five years.....	3,260	13,925	1,686
Twenty-six to thirty years.....	7,156	3,806	1,203
Thirty-one to thirty-five years.....	4,202	4,547	1,082
Thirty-six to forty years.....	2,993	2,832	946
Forty-one to forty-five years.....	1,686	1,475	875
Forty-six to fifty years.....	899	706	785
Fifty-one to fifty-five years.....	393	309	786
Fifty-six to sixty years.....	170	93	547
Over sixty years.....	98	35	357

Ratio for all ages during the year, 1,367 per 1,000.

From the foregoing table it will be seen that even during a year of exceptional health for the Army a greater proportion of invalids was furnished by troops under thirty-one years of age; while up to the age of twenty-five the rate proved so much above the mean for the whole Army that it may fairly be questioned whether the services rendered by these young men are equal to the cost of their maintenance.

Nativity.—The number of admissions among native white troops was 16,912 cases, or 1,368 per 1,000 of strength. Among those of foreign birth, 12,777 cases, or 1,334 per 1,000 of strength; while among colored troops there were 3,301 cases, 1,505 per 1,000 of strength.

RELATIVE PREVALENCE OF DIFFERENT DISABILITIES.

Injuries.—An examination in detail of table given under Appendix A will show that, as during the preceding year, admissions for the re-

sults of injuries stand first on the list, with a rate of 18 per cent. of all cases reported.

Diarrheal diseases.—These are next in order, having advanced from the third to the second place during the year, although the actual number of cases was less. During the month of July the number of cases was slightly in excess of the usual rate, the increase occurring in the central river region. For all other months there was a decided reduction in the rates of admission, the average for the whole year being over one-fifth less than for the decade. All but 2 of the 6 deaths registered under this head occurred from acute dysentery, and they were confined to white troops.

Although the rate of deaths to the number of cases treated was higher than for the preceding year, still it was lower than the usual death-rate from this cause.

Diseases of the respiratory system.—A decrease in the relative number of cases of respiratory diseases will be noticed, the improvement being apparent equally among white and colored troops. Although there were, on the whole, fewer cases of catarrh and bronchitis, the number of admissions for inflammation of the lungs was relatively greater.

During August and November the monthly rate of occurrence for this disease showed a marked departure, not only from the ten-year average for these months, but also from the rates for the same months during 1884. In no instance was the usual monthly rate exceeded.

The percentage of deaths from inflammation of the lungs to the number of cases treated, though slightly above the usual rate, was much lower than for the previous year.

The cavalry corps furnished 35 of the 90 cases of pneumonia reported, or 4.38 per 1,000 of its mean strength; the infantry, 30 cases, or 2.54 per 1,000; the artillery, 10, or 3.49 per 1,000.

Seven cases were reported among the cavalry troops at Fort Walla Walla, Wash.; 3 at Fort Clark, Tex.; 2 at Fort Davis, Tex.; 2 at Fort Lewis, Colo.; 2 at Fort Meade, Dak.; 2 at Fort Buford, Dak.; 2 at Fort Stanton, N. Mex.; the remainder being scattered among different stations west of the Mississippi River. The conditions attending the outbreak of this disease at Fort Walla Walla are not reported.

Among recruits at David's Island, New York Harbor, there were 7 cases and no deaths.

Pulmonary phthisis.—Sixty-five cases of pulmonary phthisis were admitted to treatment, against 67 for the year previous and 90 for 1883. Of these the white troops furnished 59 cases, and the colored troops 6.

The number of deaths from this cause was 13, and the number of discharges 50.

The infantry furnished 25 cases of the disease, or 2.12 per 1,000 of strength; the cavalry 23 cases, or 2.88 per 1,000; the artillery 10 cases, or 3.49 per 1,000.

Twenty cases occurred among men of one year of service or less, or 3.22 per 1,000 of strength; 14, or 3.85 per 1,000, in men of two years' service; 20 cases occurred in men of from three to twelve years' service, or 1.72 per 1,000 of strength; while among those of fifteen years' service and over there were 11 cases, or 2.40 per 1,000.

With the elimination by death and discharge of men who possessed peculiar susceptibility to phthisis through heredity or other causes the ratio of liability seems to have decreased, so that troops in their third year of service, and up to the fifteenth, afforded less than one-half the number of admissions to strength shown by those of any less service. Beyond the period of fifteen years' service the rate increased as stated.

Malarial fevers.—This class of diseases, which occupied the fourth place on the list for the year 1884, was lowered to the fifth place, the number of cases per 1,000 of strength falling from 147 per 1,000 to 120 per 1,000.

The number of deaths was 4 against 6 for the previous year, and the rate of mortality, .14 per cent of the cases treated, against .17 per cent. for 1884, and .15 per cent. for the decade. Comparison with the monthly averages for the preceding ten years shows a marked reduction, fully 43 per cent., in the average of its monthly rate of occurrence. Again, the lowering appears to have been uniform, so that no single month showed any great departure from the normal.

For the year 1885, as during the preceding year, there was reported from the colored troops the greatest number of cases of malarial fever in proportion to mean strength, the excess probably being determined by endemic causes that pertained to the posts at which these troops were stationed. Only 1 death, however, was reported among them from this cause.

Out of 139 military stations from which reports have been received, 36 showed a rate of occurrence for malarial fever which was in excess of the average rate of 120 per 1,000 of strength. Of these Fort Gibson and Fort Sill, Ind. T., had the highest rates, the former giving 1,287 per 1,000, the latter, 753 per 1,000. Thirty-four other stations furnished during the year the following number of cases per 1,000 of strength:

Station.	Cases per 1,000.	Station.	Cases per 1,000.
Fort Myer, Va.....	661	Leavenworth, Kans.....	194
Jefferson Barracks, Mo.....	630	Fort Grant, Ariz.....	184
Indianapolis Arsenal, Ind.....	444	Fort Monroe, Va.....	174
Fort Reno, Ind. T.....	411	San Antonio, Tex.....	171
Springfield Arsenal, Mass.....	386	Willets Point, N. Y.....	170
Fort Clark, Tex.....	350	Fort Riley, Kans.....	167
Little Rock Barracks, Ark.....	346	Fort Wadsworth, N. Y.....	159
Fort Brown, Tex.....	323	Fort McHenry, Md.....	156
Mount Vernon Barracks, Ala.....	311	Fort Hays, Kans.....	156
Fort Bayard, N. Mex.....	297	Fort Supply, Ind. T.....	156
Fort Ringgold, Tex.....	245	Fort Lowell, Ariz.....	155
Columbus Barracks, Ohio.....	242	Washington Barracks, D. C.....	150
Fort Lyon, Colo.....	238	Rock Island Arsenal, Ill.....	150
Fort Barranca, Fla., and Camp Mitchell, Ga., same command.....	237	Fort McIntosh, Tex.....	150
Fort Thomas, Ariz.....	217	Fort Bliss, Tex.....	147
Fort Davis, Tex.....	207	Saint Augustine, Fla.....	137
Frankford Arsenal, Pa.....	194	Fort Concho, Tex.....	128

Typho-malarial fever contributed a total of only 18 admissions and 3 deaths, against 40 admissions and 11 deaths for the previous year.

During the months of January, February, March, May, July, and November there were no cases reported, and the monthly average of cases per 1,000 of strength for the year was only about one-fourth of that for the preceding decade. The death rate was also considerably lower than for the previous year, standing as 16.67 per cent. to 27 per cent. of cases treated.

Enteric fever.—Only 76 cases of this disease were reported during the year, or 3 per 1,000 of mean strength. The number of deaths were

9, or about 12 per cent. of cases treated, and the number of discharges from the results of the disease, 2. These figures show a marked reduction from its usual rate of occurrence.

During the previous year there were 156 cases reported, and 222 in 1883, the rate for that year being 11 per 1,000, or nearly four times greater than for 1885.

The disease appeared at 36 stations during the year, against 39 for the previous year.

The number of stations at which it continued to make its appearance, as a result of the infection of the year previous, was 19; while the number of posts newly invaded was 17; the number of posts where the disease ceased to exist was 20.

The recruiting depot at Jefferson Barracks, Mo., furnished during the year but 6 cases and no deaths. During the previous year the number of cases at this post had been 35, and deaths, 10; while for the year 1883, there were 56 cases and 9 deaths reported. Some of the posts, other than Jefferson Barracks, Mo., showing marked improvement in this respect over the previous year, are as follows: Vancouver Barracks, Wash., only 2 cases were reported during the year, against 12 for the previous year; Fort Lowell, Ariz., 2 cases, against 10 cases and 3 deaths; Fort Wayne, Mich., 2 cases, against 8 for the previous year.

The greatest number of cases occurred at Fort Douglas, Utah, which post furnished 12 cases, with 1 death. During the previous year there were but 2 cases and 1 death reported, while for the year 1883 there were 20 cases and 1 death. This shows that while the prevalence of this disease was much greater at the post than for the previous year, it was only a little above the average for the three years past.

At Fort Riley, Kans., there were reported 9 cases of enteric fever and 1 death, while for the previous year there were but 3 cases reported. The medical officer reports 3 of these cases as occurring in recruits recently arrived from Jefferson Barracks, Mo.

Appearance of enteric fever in the several arms of service.—The cavalry troops continue to furnish the greater proportion of cases, as they have done for several years past. The distribution among the several arms was as follows: Infantry, 28 cases, or 2.37 per 1,000 of strength; cavalry, 31 cases, or 3.88 per 1,000; artillery, 8 cases, or 2.79 per 1,000; general service recruits, 5, or 4.79 per 1,000; Signal Corps, 2, or 3.92 per 1,000; ordnance, 1, or 2.06 per 1,000; and Medical Department, 1, or 2.97 per 1,000.

Rheumatism.—Under this head there were reported 2,117 cases, against 2,471 cases for the previous year, the rate being 88 per 1,000, against 103 per 1,000 of strength. The average monthly rate of occurrence was lowered from 8.51 per 1,000 for 1884, to 7.24 per 1,000 for this year. The greatest reduction from the monthly mean for the decade, which was 9.97 per 1,000, appeared during February and March. Of the several varieties of this disease returned, there were 83 cases of acute articular rheumatism, or, more properly, rheumatic fever, while the remaining cases were largely made up of so-called muscular rheumatisms, together with a fair number of chronic articular rheumatisms.

Age of incurrence.—Thirty-five of the 83 cases of acute articular rheumatism occurred in soldiers under twenty-six years of age, giving a ratio for the whole number of such men of 4.14 per 1,000; between the ages of twenty-six and forty-one, there were 41 cases, or a rate of 2.86 per 1,000. The remaining 7 cases occurred in men between the ages of forty-one and fifty-six.

The several arms of service furnished cases in the following proportion: Infantry, 43 cases, or 3.6 per 1,000 of strength; cavalry, 25 cases, or 3.1 per 1,000; artillery, 3 cases, or 1 per 1,000; ordnance 6 cases, or 12.3 per 1,000; Medical Department, 4 cases, or 11.9 per 1,000; general service recruits, 2 cases, or 2.7 per 1,000.

There were 2 deaths and 63 discharges from this complaint.

Venereal diseases.—There was a decrease in the number of admissions for venereal diseases, so that the ratio was 55 per 1,000, against 65 per 1,000 for the previous year. The colored troops gave a slightly lower rate than the white.

Acute infectious diseases.—Of this class, there was reported 1 case of chicken-pox; 57 of dengue; 32 of diphtheria, with 1 death; 36 of measles; 50 of mumps; 2 of scarlet fever, with 1 death; 1 of typhus fever, and 9 other cases of specific and infectious diseases.

Of the 57 cases of dengue fever reported, 56 were from the following stations in Texas; Fort McIntosh, 37; Fort Brown, 9; San Antonio, 9; Fort Clark, 1; Saint Augustine, Fla., furnished 1 case. No deaths occurred.

Of the 32 cases of diphtheria, 25 occurred at Fort Assinniboine, Mont., no deaths; 4 at David's Island, N. Y., with 1 death; 2 at Watervliet Arsenal, N. Y.; no deaths; and 1 case at Angel Island, Cal., which recovered. The conditions attending the outbreak of diphtheria at Fort Assinniboine, were reported by Asst. Surg. Henry G. Burton, U. S. Army, the medical officer in charge, as follows:

I am unable to specify any local condition to account for the sudden development of this severe sickness. The weather has been mild and pleasant for two weeks. The snow has mostly disappeared and the ground is getting dry. The water from Beaver Creek has been surface water from the rapidly melting snow. The task of ventilating the barracks during the winter has proved almost impossible. Thus far no severe case has appeared among the prisoners, notwithstanding the fact that the guard-house is the worst ventilated place in the post. I have lately been informed that the ground floor of the quarters has a layer of weather paper between the floor boards; when the floor is scrubbed this paper must become water-soaked and eventually rotten. I understand that new flooring has been asked for, and I shall advise that no paper be used. I respectfully inclose herewith a copy of recommendations made to commanding officer, Fort Assinniboine, Mont.

Owing to the fact that the throat troubles lately prevailing here have greatly increased in severity, until at the present time it seems to have become epidemic and assumed a type of very severe illness, I would recommend that the water from the hydrants be boiled before using. It should be boiled the evening previous to the day it is intended for use and allowed to stand in a very clean barrel over night. Each evening the barrel should be completely emptied before being refilled, and the water should be thoroughly boiled. Emptying slops and wash-water about the barracks should be prohibited and the men should be cautioned about exposing themselves in any way to catch cold, such as sitting about on the porches in shirt sleeves or bare-headed, or sitting in drafts of air. In the early morning hours all should wear overcoats. On questioning some of the men who have lately been taken sick they state that the last time they filled their bedsacks the hay was wet, besides being musty and moldy. Attention should be paid to such little matters as that, and good, clean hay furnished the men if it can be done. I have inspected some of the sacks and find that in some cases the hay is bad. I do not know, however, whether any better can be procured. I would also advise a liberal use of disinfectants about the urine tanks, and, as soon as possible, that the urine-soaked earth about them be carted away and fresh earth put in its place.

Mortality and discharge statistics.—The relations of age, arm of service, nationality or race, length of service, and season of the year to the number of deaths occurring in the Army during the year are shown in the following tables.

The slight difference shown between the death rates here given and those noted on other pages of this report is due to the fact that in these tables there has been used for the total strength of the Army the actual

number of officers and men reported present on the 31st of December, 1885, through the Adjutant-General's Office :

No. 1.—Deaths occurring among officers and enlisted men in the different arms of service.

Arms of service.	Officers.			Enlisted men.			Total.		
	Mean strength.	Deaths.	Ratio per 1,000 of strength.	Mean strength.	Deaths.	Ratio per 1,000 of strength.	Mean strength.	Deaths.	Ratio per 1,000 of strength.
Engineers	109	—	—	434	6	13.8	543	6	11.0
Ordnance Department	59	1	16.9	427	3	7.0	486	4	8.2
Artillery	274	2	7.3	2,594	15	5.8	2,868	17	5.9
Cavalry	424	3	7.1	7,570	58	7.7	7,994	61	7.6
Infantry	855	4	4.7	10,964	69	6.3	11,819	73	6.2
Signal Corps	17	—	—	493	6	12.2	510	6	11.8
General service and recruits at depot	—	—	—	1,044	7	6.7	1,044	7	6.7
Non-commissioned staff	—	—	—	389	3	7.7	389	3	7.7
General officers and staff corps	402	5	12.4	—	—	—	402	5	12.4
Total for the Army	2,140	15	7.0	23,915	167	7.0	26,055	182	7.1

No. 2.—Deaths occurring among officers and men serving at the ages given.

Ages in quinquennial groups, &c.	Officers.			Enlisted men.			Total.		
	Number.	Deaths.	Ratio per 1,000 of strength.	Number.	Deaths.	Ratio per 1,000 of strength.	Number.	Deaths.	Ratio per 1,000 of strength.
Under sixteen years	—	—	—	1	—	—	1	—	—
Sixteen to twenty years	—	—	—	197	1	5.1	197	1	5.1
Twenty-one to twenty-five years	86	—	—	8,174	53	6.5	8,260	53	6.4
Twenty-six to thirty years	343	—	—	6,813	41	6.0	7,156	41	5.7
Thirty-one to thirty-five years	301	—	—	3,901	27	6.9	4,202	27	6.4
Thirty-six to forty years	231	2	7.1	2,712	20	7.4	2,943	22	7.4
Forty-one to forty-five years	379	2	5.3	1,307	18	13.8	1,686	20	11.9
Forty-six to fifty years	371	5	13.5	523	3	5.7	899	8	8.9
Fifty-one to fifty-five years	199	4	20.1	194	3	15.5	393	7	17.8
Fifty-six to sixty years	110	2	18.2	60	1	16.7	170	3	17.6
Over sixty	70	—	—	28	—	—	98	—	—
Total	2,140	15	7.0	23,915	167	7.0	26,055	182	7.1

No. 3.—Deaths occurring among officers and enlisted men of the several nationalities and races given.

Nationalities.	Officers.			Enlisted men.			Total.		
	Number.	Deaths.	Ratio per 1,000 of strength.	Number.	Deaths.	Ratio per 1,000 of strength.	Number.	Deaths.	Ratio per 1,000 of strength.
Americans	1,964	14	7.1	11,377	72	6.3	13,341	86	6.4
Austrians	1	.....	.....	201	.....	.....	202	.....	.....
Canadians	19	.....	.....	443	2	4.5	462	2	4.3
Danes, Norwegians, and Swedes	3	.....	.....	454	1	2.2	457	1	2.2
English	21	.....	.....	964	9	9.3	985	9	9.1
Alsatian and French	8	.....	.....	156	.....	.....	164	.....	.....
Germans	34	.....	.....	3,640	28	7.7	3,674	28	7.6
Irish	67	1	14.9	3,518	36	10.2	3,585	37	10.3
Scotch	10	.....	.....	234	2	8.5	244	2	8.2
Swiss	3	.....	.....	230	3	13.0	233	3	12.9
Negro, mulatto, &c. ....	.....	.....	.....	2,375	14	5.9	2,375	14	5.9
Others	10	.....	.....	323	.....	.....	333	.....	.....
Total native-born white	1,964	14	7.1	11,377	72	6.3	13,341	86	6.4
Total foreign-born white	176	1	5.7	10,163	81	8.0	10,339	82	7.9
Total .....	.....	.....	.....	.....	.....	.....	.....	.....	.....

No. 4.—Deaths occurring among officers and enlisted men at the several years of service given

Length of service.	Officers.			Enlisted men.			Total.		
	Number.	Deaths.	Ratio per 1,000 of strength.	Number.	Deaths.	Ratio per 1,000 of strength.	Number.	Deaths.	Ratio per 1,000 of strength.
Under one year of service	7	.....	.....	3,282	36	11.0	3,289	36	10.9
One year of service	22	.....	.....	2,894	14	4.8	2,916	14	4.8
Two years of service	30	.....	.....	3,602	23	6.4	3,632	23	6.3
Three years of service	24	.....	.....	2,621	9	3.4	2,645	9	3.4
Four years of service	51	1	19.6	2,108	9	4.1	2,249	10	4.4
Five years of service	62	.....	.....	991	4	4.0	1,053	4	3.8
Six years of service	69	.....	.....	1,079	6	5.6	1,148	6	5.2
Seven years of service	50	.....	.....	847	1	1.2	897	1	1.1
Eight years of service	70	.....	.....	559	5	8.9	629	5	7.9
Nine years of service	81	.....	.....	657	4	6.1	738	4	5.4
Ten years of service	156	.....	.....	765	6	7.8	921	6	6.5
Twelve years of service	184	.....	.....	1,167	16	13.7	1,351	16	11.8
Fifteen years of service and over	1,334	14	10.5	3,253	34	10.5	4,587	48	10.5
Total	2,140	15	7.0	23,915	167	7.0	26,055	182	7.1

No. 5.—Ratio of mortality to cases admitted for treatment during each month of the year.

Months.	Deaths.			Cases treated.	Ratio per 1,000.	Months.	Deaths.			Cases treated.	Ratio per 1,000.
	Officers.	Enlisted men.	Total.				Officers.	Enlisted men.	Total.		
January .....	.....	15	15	3,426	4.4	August .....	.....	21	21	2,987	7.0
February .....	.....	14	14	2,700	5.2	September	1	15	16	2,914	5.5
March	3	13	16	2,708	5.8	October .....	.....	15	15	2,532	5.9
April	2	6	8	2,389	3.3	November .....	.....	12	12	2,580	4.7
May	1	15	16	2,609	6.1	December	4	10	14	2,164	6.5
June	2	14	16	2,551	6.3	Total	15	167	182	31,990	5.5
July	2	17	19	3,370	5.6						

The rates of mortality as shown in different arms of service are given in Table No. 1. Among troops of the line the cavalry stood first, with a rate of 7.6 per 1,000 of strength, the rate for the previous year being 10.9 per 1,000; the infantry second, with a rate of 6.2 per 1,000, that for the previous year being 9.2 per 1,000; the artillery third, with a rate of 5.9 per 1,000, while for the previous year it was 7.0 per 1,000.

Among the other corps the reduction in mortality was equally marked, the Engineers giving a rate of 11.00 per 1,000 against 13.1 per 1,000 for the previous year; the Ordnance, 8.2 per 1,000 against 11.4 per 1,000, and the Signal Corps, 11.8 per 1,000 against 19.9 per 1,000.

There appears to have been little difference in the death rates shown by the totals for commissioned officers and enlisted men, the former having 7.0 and the latter 7.1 per 1,000 of mean strength.

The ages giving the greatest relative mortality was, for commissioned officers, the period between fifty and fifty-six, and for enlisted men, that between fifty-six and sixty.

The greatest actual number of deaths, 144, occurred in men under their forty-first year of age, but this is to be accounted for by the fact that the mass, fully 87 per cent. of the men composing the Army, are under the age of forty-one. (See Table No. 2.)

The effects of acclimatization upon the soldier are shown in the high rates of death among troops in their first year of enlistment, which reached 11 per 1,000 of their number. In fact, the first year is essentially a period of weeding out, and after that the death rate usually drops below the average for the whole Army, and so remains until the men of more than ten years of service are attacked.

Nativity of decedents.—Among native-born white troops, 86 deaths took place, or 6.4 per 1,000 of strength; among foreign born, 82, or 7.9 per 1,000; among colored troops, 14, or 5.9 per 1,000. Men of Irish birth furnished the highest mortality rate, or 10.3 per 1,000 of strength;* the English stood next on the list, with a rate of 9.1 per 1,000; the Germans third, with a rate of 7.6 per 1,000. During the previous year, also, the Irish furnished the highest death rate, the Germans and English standing second and third on the list.

Season of greatest mortality.—The month showing the greatest number of deaths to cases treated was August, when the rate arose to 7 per 1,000; next came December, with a rate of 6.5 per 1,000. In April the rate dropped to 3.3 per 1,000; the average rate for the year being 5.5 per 1,000. (See Table No. 5.)

The loss to the Army during the year by discharges for disability resulting from disease and injury was 757, or 31.7 per 1,000 of strength. The highest rate for discharge among troops of the line occurred in the cavalry, which furnished 263 cases, or 34.7 per 1,000 of strength. The infantry lost 317 men, or 28.9 per 1,000; and the artillery 84, or 32.4 per 1,000.

Among native-born white troops, 366 were discharged, or 32.2 per 1,000 of their strength; of foreign born, 328, or 32.3 per 1,000; the colored troops, 63, or 26.5 per 1,000. Among troops of foreign birth, the English lost 35.3 per 1,000 of their strength; the Germans 31.6 per 1,000; the Irish 29.6 per 1,000.

*The greatest number of deaths in proportion to strength was shown by the Swiss—12.9 per 1,000; but as there were only 233 men of this nationality in the Army, the high mortality is considered accidental. The same can be said of the Scots, who number only 244 men and furnished 2 deaths.

The relation of length of service to rate of discharge for disability, is similar to the death rate; out of troops in their first and second year of service the discharges numbered 333, or 53.9 per 1,000 of strength, which is nearly double the rate for all years of service. The years showing the least number of discharges for disability were those above the fourth; the ratio being reduced much below the mean. (See Table No. 9.) The same fact exists in relation to the diminution of loss by death after the third year of service, and is shown in Table No. 4.

The relations of discharges to arm of service, ages, years of service, race and nationality, are shown in the following table:

DISCHARGES FOR DISABILITY.

No. 6.—Discharges for disability among enlisted men of the different arms of service.

Arms of service.	Enlisted men serving in each arm.	Discharges.	Ratio per 1,000 of strength.
Engineers.....	434	7	16.1
Ordnance.....	427	7	16.4
Artillery.....	2,594	84	32.4
Cavalry.....	7,670	263	34.7
Infantry.....	10,964	317	28.9
Signal Corps.....	493	5	10.1
General service and recruits at depots.....	1,044	68	65.1
Non-commissioned staff.....	389	6	15.4
Total for the Army, exclusive of commissioned officers and Indian scouts.....	23,915	757	31.7

No. 7.—Discharges for disability among enlisted men serving at the ages given.

Ages for each quinquennial group.	Enlisted men serving in each group.	Discharges.	Ratio per 1,000 of strength.
Under sixteen years.....	1		
Sixteen to twenty years.....	197	1	5.1
Twenty-one to twenty-five years.....	8,174	340	41.6
Twenty-six to thirty years.....	6,813	210	30.8
Thirty-one to thirty-five years.....	3,901	88	22.6
Thirty-six to forty years.....	2,712	51	18.8
Forty-one to forty-five years.....	1,307	34	26.0
Forty-six to fifty years.....	528	16	30.3
Fifty-one to fifty-five years.....	194	13	67.0
Fifty-six to sixty years.....	60	8	50.0
Over sixty years.....	28	1	35.7
Total for the Army.....	23,915	757	31.7

No. 8.—*Discharges for disability among enlisted men of the several nationalities and races given.*

Nationality of troops serving.	Enlisted men serving in each group.	Discharges.	Ratio per 1,000 of strength.
Americans	11,377	366	32.2
Austrians	201	5	24.9
Canadians	443	16	36.1
Danes, Norwegians, and Swedes	454	14	30.8
English	964	34	35.3
Alsatians and French	156	9	57.7
Germans	3,640	115	31.6
Irish	3,518	104	29.6
Scotch	234	9	38.5
Swiss	230	11	47.8
Negro, mulatto, &c	2,375	63	26.5
Others	323	11	34.1
Total native-born white	11,377	366	32.2
Total foreign-born white	10,163	328	32.3

No. 9.—*Discharges for disability among enlisted men at the several years of service given.*

Years of service.	Enlisted men serving in each group.	Discharges.	Ratio per 1,000 of strength.
Under one year	3,282	213	64.9
One year	2,894	120	41.5
Two years	3,602	120	33.3
Three years	2,621	76	29.0
Four years	2,198	37	16.8
Five years	991	22	22.2
Six years	1,079	25	23.2
Seven years	847	13	15.3
Eight years	559	9	16.1
Nine years	657	8	12.2
Ten years	765	15	19.6
Twelve years	1,167	27	23.1
Fifteen years and over	3,253	72	22.1
Total for the Army	23,915	757	31.7

No. 10.—*Rate of discharges for disability to cases admitted for treatment during each month of the year.*

Months.	Cases admitted.	Discharges.	Ratio per 1,000 of admissions.
January	3,426	51	14.9
February	2,700	50	18.5
March	2,768	67	24.2
April	2,389	80	33.5
May	2,609	71	27.2
June	2,551	48	18.8
July	2,370	67	19.9
August	2,987	82	27.5
September	2,914	71	24.4
October	2,532	52	20.5
November	2,580	67	26.0
December	2,164	51	23.6
Total for the year	32,990	757	22.9

Health of geographical divisions.—The relative prevalence of diseases that are usually referable to the effects of altitude, the presence or absence of vegetation, the conditions of moisture or dryness of the atmosphere and soil, to the force of winds, and to variations in temperature, are shown in the tables embraced under Appendix C.

Grouping such stations as are situated on the sea-coast and lakes, we find that diseases of the respiratory organs and those of the heart and its valves had a higher rate of occurrence than in either the river regions or the region of mountain and plateau. On the other hand, there was a decidedly lower rate of occurrence for diarrheal diseases, for typho-malarial fever, and for the malarial fevers.

Comparing rates in the coast regions with those of the previous year, it is shown that while there has been a slight increase of admissions for diarrheal diseases, for most other diseases except pneumonia there was a lowering of the rates.

In the river regions the admission rates have been less for all important disorders than they were during the previous year, pneumonia and diarrheal diseases being excepted, while a decided decline was shown in rates for enteric and typho-malarial fevers.

In the mountain and plateau regions there was a slight increase of diarrheal diseases and pulmonary phthisis over the preceding year; in all other respects, however, there was lowering of admission rates for all diseases noted.

Grand division (see map, Report of 1885).	Rate of admission to 1,000 of strength.							
	Enteric fever.	Typho-malarial fever.	Malarial fever.	Diarrheal diseases.	Rheumatism.	Diseases of heart and valves.	Pulmonary phthisis.	Pneumonia.
Sea-coast, Gulf, and lake regions	3.4	.5	94.0	156.1	87.3	7.6	3.4	4.9
River region, north and south	4.1	.8	183.4	183.7	83.9	6.8	2.2	3.5
Mountain and plateau region *	2.4	.9	88.8	157.9	95.8	6.1	2.9	3.4
								105.7
								82.0
								66.3

* Roughly traced, this region lies between the western slope of the Pacific coast ranges of mountain and an irregularly oblique line running from near the headwaters of the Missouri River, in the north-west, to a point some 200 miles from the mouth of the Rio Grande.

The average of admission rates for all stations in the North Atlantic region for the year was 1,668 per 1,000 of strength, which is 313 per 1,000 higher than the average for the entire Army, and higher by 22 per 1,000 than the rate of the previous year. The rate of constant non-effectiveness was 44 per 1,000 of strength, which was higher than the mean of the Army, and also higher than for the year preceding.

Posts in the South Atlantic region gave an average admission rate of 1,705 per 1,000 of strength; this is greater than for the whole Army by 350 per 1,000, but lower than for the previous year by 61 per 1,000. The rate of constant non-effectiveness was 44 per 1,000 of strength, or 13 per 1,000 lower than for the previous year.

For the Gulf region the admission rate was 1,780 per 1,000, or 425 per 1,000 greater than for the whole Army; the rate of constant non-effectiveness was 61 per 1,000; both of these rates, however, are considerably lower than for the previous year.

The Pacific coast region furnished admissions which were equivalent to 791 per 1,000, or 564 per 1,000 less than for the whole Army, and a

constant rate of only 27 per 1,000. Exception must be made for the post at San Diego, Cal., where, from causes that have already been noted in the last annual report, the non-effective rate was 132 per 1,000 of strength. In both cases the rates are lower than for the previous year.

In the lake region the rate for admission was 1,027 per 1,000 of strength, which is lower than for the preceding year, while the constant non-effective rate was 27 per 1,000.

The river regions north and south furnished an admission rate of 1,518 per 1,000, which was 163 per 1,000 greater than for the whole Army, and 93 per 1,000 less than for the previous year. The constant rate was 46 per 1,000.

The region of mountain and plateau gave a rate of 1,349 per 1,000 of strength for admissions, which was very near the average for the Army, and 182 per 1,000 less than for the previous year.

HEALTH OF TROOPS BY MILITARY DEPARTMENTS.

The Department of Texas stands first on the list with an admission rate of 1,641 per 1,000 of strength, and a constant rate of 55 per 1,000, the rates for the previous year being 1,510 per 1,000 and 53 per 1,000. The troops showed a special liability to malarial fever, diarrheal diseases, and to venereal and integumentary disorders.

In the Department of the East the admission rate was 1,565 per 1,000 of strength, and the constant non-effective rate 45 per 1,000, the rates for the previous year being somewhat higher, 1,590 per 1,000 and 45 per 1,000. Diseases of the respiratory system, exclusive of pulmonary phthisis, were the prominent causes of admission.

The Department of the Missouri, which stood first upon the list during 1884, has dropped to the third place; its admission rate being 1,531 per 1,000 against 1,771 per 1,000 for the previous year, and its constant non-effective rate 44 per 1,000 against 46 per 1,000. The only diseases showing any special prominence were the malarial fevers, diarrheal diseases, tonsillitis, and other digestive diseases. As during the preceding year, the Department of the Columbia proved to be the healthiest, the admission rate being only 775 per 1,000 against 998 per 1,000 for 1884; and its constant non-effective 28 per 1,000 against 35 per 1,000.

In the Department of California the admission rate was 953 per 1,000 against 1,203 per 1,000 for the previous year, and the constant non-effective 33 per 1,000 against 41 per 1,000. The number of admissions for alcoholism was conspicuously large, and there was an entire absence of enteric and of typho-malarial fevers.

The Department of Arizona gave an admission rate of 1,071 per 1,000 against 1,414 per 1,000 for the previous year, and a constant non-effective of 33 per 1,000 to 47 per 1,000. While no single class of diseases was prominent, the rate for diarrheal diseases was above the average for the Army.

From the Department of the Platte there was reported an admission rate of 1,222 per 1,000 against 1,489 per 1,000 for the preceding year, and a constant non-effective rate of 39 per 1,000 against 43 per 1,000. Enteric fever, alcoholism, and rheumatism were conspicuously prevalent in comparison with the rates of occurrence shown in most of the other departments.

The Department of Dakota gave an admission rate of 1,314 per 1,000 against 1,529 per 1,000 for the previous year, and a constant non-effective rate of 38 per 1,000 against 40 per 1,000. Digestive diseases and

rheumatism were reported in excess of any other department, and the respiratory diseases were very prevalent, although the rate was lower than shown in any previous report. The colored troops furnished proportionally the greater number of cases of the diseases mentioned.

The following table will show in detail the ratios of occurrence for the principal diseases reported in each military department:

Rates of admission to 1,000 of strength.

Causes of admission.	Department of the East (mean strength, 4,852).	Department of Texas (mean strength, 2,142).	Department of the Missouri (mean strength, 6,190).	Department of Dakota (mean strength, 4,620).	Department of the Platte, (mean strength, 2,924).	Department of Arizona (mean strength, 1,875).	Department of California (mean strength, 1,059).	Department of the Columbia (mean strength, 1,125).
Enteric fever.....	3.9	1.4	3.7	0.2	6.8	2.1	-----	5.8
Malarial fever.....	123.9	205.9	245.2	33.3	46.2	93.3	24.6	64.2
Typho-malarial fever.....	0.8	1.9	0.6	0.6	-----	1.6	-----	0.6
Diarrheal diseases.....	190.8	246.0	220.8	105.0	185.8	166.9	86.9	52.1
Venereal diseases.....	117.5	134.5	59.7	72.1	72.2	62.4	47.2	31.2
Alcoholism.....	68.6	63.0	83.7	54.5	71.8	35.7	70.8	26.0
Rheumatism.....	99.1	92.9	75.7	109.5	95.4	60.8	62.3	46.3
Pulmonary phthisis.....	2.7	5.1	1.9	0.6	2.4	3.7	7.6	2.9
Respiratory diseases (exclusive of pulmonary phthisis).....	197.2	108.8	160.3	179.2	158.7	80.0	101.0	92.6
Tonsillitis.....	40.6	31.7	59.9	49.6	58.1	20.8	30.2	20.8
Digestive diseases (exclusive of tonsillitis).....	150.0	103.6	138.5	160.4	110.5	97.1	81.2	65.4
Integumentary diseases.....	82.6	115.3	83.6	68.8	62.2	57.6	54.8	61.3
Injuries.....	233.9	289.4	244.9	270.8	222.3	239.5	254.0	214.7

HEALTH OF MILITARY STATIONS.

Fort Myer, Va., heretofore a school of instruction for the United States Signal Service, with a garrison of fifty-six officers and men, gave a higher admission rate than any other post, it being 4,304 per 1,000 of strength. This is greater than the rate for the previous year, and more than three times the average rate of the Army. The diseases which contribute to so large an amount of invalidism were bronchitis, malarial fevers, and diarrhea. No explanation of these high rates has been reported by the medical officer in charge, but they are probably due to a water supply largely contaminated with decaying vegetable matter, and to miasmatic exhalation from the flats of the Potomac River, which are near the station.

Jefferson Barracks, Mo., which is a depot for cavalry recruits and has a fluctuating garrison of 557 officers and men, gave a rate of 3,115 per 1,000 of strength, which is higher than the rate for the previous year; the prevalent diseases were diarrhea, malarial fevers, catarrh, and disorders of the nervous and digestive systems. Enteric and typho-malarial fevers, which hitherto have been the scourge of the troops at this post, are now so greatly decreased that their ultimate extinction as endemic diseases may be hoped for.

Fort Gibson, Ind. T., with a garrison of eighty-seven officers and enlisted men, had a rate of 2,828 per 1,000, the rate for the previous year being 2,740 per 1,000. As before stated, malarial fevers are extremely prevalent at this post, and are very largely the cause of its high admission rates.

Willets Point, N. Y., garrisoned by the Engineer battalion, 394 officers and men, is another unhealthy station, having for this year an admission rate of 2,782 per 1,000, and for the previous year 1,915 per 1,000. The prevalent diseases were diarrhea, catarrhal fever, diseases of the digestive system, and rheumatism. Malarial fevers, too, were quite common, furnishing a high rate compared with the average.

In addition to the stations enumerated, there were fifty other posts having admission rates greater than the average for the Army, which was only 1,355 per 1,000 of strength for the year.

Health of troops serving in the field.—In the military departments of Arizona, Missouri, and Texas troops have been engaged in active field operations during the greater part of the year. Reports were received from medical officers of eighty-four commands, either in temporary camps or directly operating against hostile Indians in the field, or *en route* from one station or department to another.

The number of troops so engaged in each department was as follows: Arizona, 2,024; Missouri, 4,804; Texas, 1,596, making an apparent aggregate for the year of 8,424 officers and men; but, as many of the commands served frequently in two or more departments, a correction for duplication becomes necessary, which will reduce the aggregate given to an actual strength of about 6,600 officers and men.*

The total number of admissions to sick report out of this force was 979, of which 766 were for disease and 213 for injuries. From the number admitted there were transferred to post hospitals for treatment 84 cases, the remainder being held with the commands to which they were attached for final dispositions. There were reported 4 deaths from disease and 11 from injuries. The complaints for which the greater number of admissions were recorded were diarrheal and malarial disorders, the former furnishing a rate of 154.0 per 1,000 of mean strength, the latter 113.7 per 1,000. There were 49 cases of acute dysentery reported, with 2 deaths, and 26 cases of remittent fever with no deaths. The rates of admission for all causes were, for the Department of Arizona, 580 per 1,000 of mean strength, corrected for time; for the Department of the Missouri, 975 per 1,000, and for the Department of Texas, 424 per 1,000.

Within the Departments of the Platte and of Dakota, although there were no hostilities reported, there was a large amount of field duty performed by the troops, since there were 28 commands and about 3,000 officers and men either *en route* or in the field.

The total number of cases reported was 276, giving a yearly rate of 1,034 per 1,000 of mean strength as corrected for time.† Two hundred and two of these admissions were for disease and 74 for injuries.

In the Departments of California and the Columbia there were twelve commands reported in the field. Out of 615‡ officers and men so serving there were reported 21 admissions only, giving a yearly rate of 429 per 1,000 of mean strength.

Comparing the rate of admission among troops in garrison, which was 1,394 per 1,000, with that of troops performing field service, which was 799 per 1,000, it will be seen that, notwithstanding hard work, ex-

* As many of the commands served for brief periods only, especially those *en route*, it is necessary in computing ratios that the strength should be corrected for time, that is, reduced to a figure that will represent a daily average of strength for the entire year, which, in this case, would be 1,266 officers and men.

† The strength corrected for time represents a daily average for the entire year of 267 officers and men.

‡ Corrected for time, 49 officers and men.

posure, and unaccustomed fare, the health of the men has, on the whole, been very satisfactory, and that active operations were rather conducive to the maintenance of high bodily vigor than otherwise.

The relation of the occurrence of certain diseases to the months and seasons of the year.—Illustrations of monthly variations in the occurrence of several important diseases are given in the following table:

Table showing for the year 1885, and for the preceding decade, the monthly rates of occurrence to 1,000 of mean strength of certain diseases in the United States Army, together with the number of deaths per 100 of cases treated.

Months.	Enteric fever.		Typho-malarial fever.		Malarial fever.		Diarrheal diseases.	
	Year.	Decade.	Year.	Decade.	Year.	Decade.	Year.	Decade.
January.....	.16	.21	.00	.69	4.88	9.88	8.77	12.14
February.....	.08	.16	.00	.05	4.21	9.81	7.11	10.85
March.....	.04	.08	.00	.04	5.49	11.64	5.89	11.59
April.....	.12	.08	.04	.14	6.75	14.49	7.39	11.35
May.....	.04	.11	.00	.13	8.17	17.85	9.38	15.70
June.....	.13	.19	.13	.25	11.42	18.72	18.97	22.15
July.....	.45	.86	.00	.67	13.66	21.50	34.02	32.82
August.....	.58	.68	.08	.47	17.21	27.11	29.85	33.94
September.....	.58	.79	.17	.53	18.92	31.42	18.16	27.72
October.....	.46	.76	.29	.41	16.15	24.61	11.21	18.42
November.....	.37	.89	.00	.22	9.54	15.62	6.84	14.10
December.....	.12	.27	.04	.13	4.61	10.74	6.38	12.68
Monthly average.....	.26	.84	.06	.23	10.01	17.64	13.58	18.45
Annual death rate to 100 of cases treated.....	11.84	19.00	16.67	15.00	0.14	0.15	0.18	0.19

Months.	Rheumatism.		Pneumonia.		Bronchitis.		Catarrh.	
	Year.	Decade.	Year.	Decade.	Year.	Decade.	Year.	Decade.
January.....	9.05	11.06	.71	.82	15.52	9.39	14.65	23.40
February.....	6.91	10.40	.52	.70	10.09	7.85	10.21	18.49
March.....	8.49	11.83	.48	.72	6.21	7.46	9.66	17.69
April.....	7.63	10.76	.40	.49	3.64	5.15	5.61	13.61
May.....	7.22	10.81	.29	.31	3.11	3.71	5.52	9.25
June.....	6.49	9.21	.17	.23	1.73	2.34	2.23	5.78
July.....	6.46	8.80	.16	.21	1.11	2.08	2.39	4.25
August.....	5.70	8.04	.08	.19	0.91	2.25	2.79	4.95
September.....	6.89	8.33	.13	.18	2.55	2.91	4.93	7.23
October.....	6.60	9.15	.21	.29	3.74	4.23	5.89	9.36
November.....	7.75	9.75	.12	.39	5.72	6.55	6.68	13.23
December.....	7.50	10.62	.37	.40	5.73	8.36	6.84	17.46
Monthly average.....	7.24	9.97	.31	.42	5.07	5.23	6.51	12.17
Annual death rate to 100 of cases treated.....	0.09	0.05	18.89	18.00	0.20	0.22	0.00	0.00

The foregoing shows differences in the average rate of occurrence of each disease among every 1,000 officers and men who compose the mean strength of the Army; and this for each month of the decade ending December 31, 1884, and during the several months of the year 1885.

In making use of this table to ascertain the amount of departure from the monthly average of occurrence for any of the diseases given, it is only necessary to multiply by 1,000 the number of cases of the disease selected which were admitted during the month at any given post, and divide the product by the mean strength of command for the same month—*e. g.*, at Fort Gibson, Ind. T., during the month of September,

1885, there were 23 cases of malarial fever; the mean strength of command for the month was 92 officers and men, which gives the following equation:

$$\frac{23 \times 1000}{92} = 250 \text{ per thousand.}$$

By reference to the column for malarial fever, the standard for that disease will be found to be during September, 31.42 per thousand, the difference showing that the prevalence of malarial fever at Fort Gibson for September was excessive, the rate being more than seven times greater than the average rate of occurrence for the whole Army during the month given.

SURGICAL REPORT FOR THE YEAR.

Upon consolidated reports of the Medical Department received at this office during the year, there were returned 6,016 cases of injuries, of which 3,393 were cases of contusions and sprains, that, while contributing materially to the non-effectiveness of the troops, were not of a serious nature.

The rate of occurrence for injuries was 247 per thousand of strength, against 273 per thousand for the previous year.

Deaths from wounds or other violent causes numbered 72, being in the proportion of 2.95 per 1,000 of strength to 3.45 per 1,000 for the previous year. The number of discharges on certificates of disability for this cause was 69. Appendix B will show, in tabular form, the specific nature of the various causes of death from injuries, with ratios for white and colored troops separately.

The years 1883 and 1884 were without casualties from actual warfare. Early in the spring of 1885, however, an outbreak occurred among the Chiracahua Apaches, which was followed by several engagements, in which our troops (chiefly Indian scouts) suffered some losses.

At Devil's Creek, New Mexico, May 22, Troops A and K of the Fourth Cavalry, and Indian scouts, under Capt. A. Smith, Fourth Cavalry, engaged the band mentioned, with the loss of 1 enlisted man and 1 scout wounded. The casualties among the hostiles, if any occurred, could not be ascertained. The wounded were transferred to Fort Bayard, N. Mex., and placed under the care of Surg. V. B. Hubbard, U. S. Army. Near Oporto, Mexico, whither the hostiles had been followed by Capt. E. Crawford, of the Third Cavalry, and his command of Indian scouts, an affair occurred on the 23d of June, in which 1 scout was wounded, 1 hostile killed and 3 wounded. Asst. Surg. P. R. Egan, U. S. Army, was in attendance and cared for the wounded.

August 7, in the Sierra Madre Mountains, Mexico, Lieut. M. W. Day, Ninth Cavalry, commanding Indian scouts, met the hostiles, with a result of 5 killed, 3 wounded, and 15 captured on their side, our troops sustaining no casualties. Asst. Surg. H. P. Birmingham, U. S. Army, was with the command and furnished the report.

September 22, in the Torres Mountains, Mexico, Capt. W. Davis, Fourth Cavalry, commanding Indian scouts, had an engagement with the hostiles, in which he lost 1 scout killed and 1 wounded, the hostiles leaving on the field 1 killed and several wounded. Asst. Surg. H. P. Birmingham, U. S. Army, was with the command and reported the casualties.

November 7, near Beyer's Springs, N. Mex., a patrol guard of the Sixth Cavalry was ambushed by hostile Apaches. One Indian scout was killed and 1 enlisted man wounded.

December 8 and 9, at Clear Creek, New Mexico, a detachment of Troop C, Eighth Cavalry, Lieut. S. W. Fountain, Eighth Cavalry, commanding, attacked the hostile Apaches, killing 2 and wounding several; no casualties occurred among the troops. Asst. Surg. T. J. C. Maddox, U. S. Army, was with the command and furnished the report.

December 19, at Little Dry Creek, New Mexico, the same command was ambushed by the hostiles. In this affair 1 officer and 4 enlisted men were killed, and 1 officer and 2 enlisted men wounded, Assistant Surgeon Maddox losing his life.

This engagement closed the melancholy list and completed a total of 7 killed and 8 wounded.

In addition to the casualties of battle, the rifle-range furnished its quota of gunshot wounds, 3 of which were instantly fatal; besides, 3 men being lost to the service by discharge for disability from this cause. The remaining 12 were returned to duty cured.

Of the instantly fatal cases for the year 1 was a shot wound in the head, 1 of the face, and 1 of the abdomen. The location of injury in 15 cases where recovery took place was as follows: Scalp, 3; face, 2; neck, 1; chest, 1; femur, fracture, 1; finger, fracture, 1; arm, flesh, 3; leg, flesh, 3.

In the preparation of ammunition for use in rifle practice there occurred 19 cases of injury from explosion of cartridges. All were followed by recovery and return to duty. Location of injury: face, flesh wound in, 4; neck, in, 2; fingers, fractured, 3; arms, flesh wounds, 8; legs, flesh, 2.

In addition to the casualties of battle and the rifle-range, there were other cases of death from shot wounds, the result of homicide, suicide, and accident, which are shown in the following table:

Cause of death.	Cases.	Anatomical location.					
		Head.	Face.	Neck.	Chest.	Abdomen.	Not stated.
Homicide.....	2	1	.....	.....	.....	1	.....
Suicide.....	9	8	1	.....	.....	.....	.....
Accidental and other shooting.....	8	3	.....	1	3	1	.....
In action.....	8	.....	1	.....	5	1	1
Aggregate.....	27	12	2	1	8	3	1

The location and character of wounds by firearms, together with the methods of treatment and results of such injuries, are shown in the following table:

Tabular summary of 139 cases of shot wounds occurring among United States troops during the year 1885, with location and character of wound, cause of injury, treatment, and result.

Location and character of wound.	Cases.	Cause of injury.					Treatment by—					
		Bird shot.	Explosion of cartridge.	Pistol ball.	Rifle or carbine ball.	Other or undetermined causes.	Operation.			Conservation.		
							Duty.	Discharge.	Death.	Duty.	Discharge.	Death.
Cranium, fracture.....	3			2		1						*3
Scalp, flesh.....	5			1	3	1				3	2	
Face, fracture.....	1				1						1	
Face, flesh.....	8		4		1	3				7	1	
Neck.....	6		2	2	2					4		2
Chest, penetrating.....	5			2	3					2	2	1
Chest, flesh.....	3			1	1	1				3		
Ribs, fracture.....	1				1					1		
Abdomen, penetrating.....	6			2	4				1			5
Pelvis, fracture.....	1			1							1	
Scapula, fracture.....	1					1					1	
Back, flesh.....	4			1	2	1				4		
Humerus, fracture.....	2				2					2		
Elbow joint, fracture.....	2			1	1					2		
Radius ulna, fracture.....	4			1	3					4		
Hand, fingers, fracture.....	22	1	3	4	13	1	14	4		3	1	
Femur, fracture.....	3			2	1			2			1	
Metatarsals, fracture.....	1				1						1	
Toes, fracture.....	3				3		2				1	
Upper extremities, flesh.....	30	3	8	8	8	3	1			29		
Lower extremities, flesh.....	28		2	8	14	4				26	2	
Aggregate.....	139	4	19	36	64	16	17	6	1	91	13	11

* One of these deaths occurred in January, 1886, being the result of a gunshot wound received in 1885.

There were 184 surgical operations reported during the year; 85 consequent upon injuries received, and 99 for the relief of surgical diseases. The nature and result of these operations are shown in the following table:

Tabular summary of 184 surgical operations performed during the year ending December 31, 1885.

Nature of operation.	Cases.	Period of operation.			Result.	
		Primary.	Intermediary.	Secondary.	Recovery.	Fatal.
Amputations of the fore-arm.....	3	2	1		3	
Amputations of the thigh.....	3	1		2	3	
Amputations of the leg.....	1			1	1	
Amputations of the ankle joint.....	2	1		1	2	
Amputations of portions of the feet.....	2			2	2	
Amputations of toe and part of metatarsal.....	3	1		2	3	
Amputations of toes alone.....	1	1			1	
Amputations of fingers and part of metacarpal.....	6	4	1	1	6	
Amputations of fingers alone.....	33	19	7	7	33	
Resection of rib.....	1			1	1	
Resection of radius.....	1		1		1	
Resection of metacarpus.....	1			1	1	

Tabular summary of 184 surgical operations performed during the year, &c.—Continued.

Nature of operation.	Cases.	Period of operation.			Result.	
		Primary.	Intermediary.	Secondary.	Recovery.	Fatal.
Ligation of the temporal artery.....	1	1			1	
Ligation of radial artery.....	2	2			2	
Ligation of femoral artery.....	1	1				1
Ligation of dorsalis pedis artery.....	1	1			1	
Extraction of fragments of bone.....	4			4	4	
Extraction of ball.....	6	4	1	1	6	
Extraction of miscellaneous substance.....	1		1		1	
Reduction of fractures.....	2	2			2	
Reduction of luxations.....	8	7	1		8	
Incisions.....	15				15	
Removal of toe nails.....	5				5	
Excisions of tumors.....	19				19	
Laryngotomy.....	1				1	
Tracheotomy.....	1					1
Excision of aneurismal sac.....	1				1	
Paracentesis abdominis.....	1					1
Aspiration hepatic.....	1					1
Wiring bones together.....	1				1	
Operations for hæmorrhoids.....	12				12	
Operations for fistula in ano.....	12				12	
Operations for fissure of anus.....	2				2	
Operations for stricture of urethra.....	7				7	
Operations for phymosis.....	15				15	
Operations for varicocele.....	2				2	
Operations for hernia.....	1				1	
Operations for diseases of the eye.....	4				4	
Operation for return of protruding intestines.....	1	1				1
Aggregate.....	184	48	13	23	179	5

There were reported 37 operations consequent on shot injuries. Twenty-eight of these were amputations; 1 a simple incision, 1 extraction of bone, 6 for extraction of the missile, and 1 operation for a return of protruding intestines after a perforating gunshot wound of the abdominal walls. In this case death from shock and peritonitis took place within twenty-four hours.

There were 95 shot injuries treated conservatively, and in 8 cases death resulted.

In addition to the foregoing, there were reported 147 operations for diseases or injuries other than shot wounds, 4 deaths resulting.

Three were resections of bone, 5 ligations of arteries, and the others miscellaneous operations, as shown in the table.

Anæsthetics were employed in 138 operations. General anæsthesia was produced by the use of sulphuric ether in 95 cases; by a mixture of chloroform and ether in 24 cases; by chloroform alone in 4; as a local anæsthetic, the ether spray was used in 6 cases; the hydrochlorate of cocaine in 10 cases. In 28 operations the reporters failed to state whether anæsthetics were used, and in 18 none was employed. No fatal results following the administration of these drugs have been returned.

Threatening symptoms occurred in 3 cases where ether was used, and in 1 operation under chloroform. In 1 case, where a mixture of chloroform and ether was employed, there was great difficulty in the production of anæsthesia, and its use followed by cessation of respiration, prostration and vomiting.

Cocaine was satisfactorily used in 2 operations upon the eye, in 2 single incisions, 1 extirpation of the toe-nail, 1 operation for hæmorrhoids, 1 circumcision, 2 operations for urethral stricture, and one for varicocele.

The use of Esmarch's elastic bandage for the control of hemorrhage during surgical operations was reported in 18 cases, as follows:

Nature of operation.	Times performed.	Nature of operation.	Times performed.
Amputation of the fore-arm.....	3	Amputation of the thigh.....	1
Amputation of the leg.....	1	Amputation of the ankle joint.....	2
Amputation of the foot.....	1	Amputation of the fingers.....	2
Amputation of the toes.....	2	Excision of the radius.....	1
Ligature of the radial artery.....	1	Ligature of the dorsalis pedis artery.....	1
Necrotomy of femur.....	1	Necrotomy of metacarpus.....	1
Operation for aneurism.....	1		

In 2 of these cases there was a troublesome capillary hemorrhage following the removal of the constricting bandage. Asst. Surg. C. N. B. Macauley, U. S. Army, reported a case of intermediary amputation of the fore-arm, following shot fracture, where severe oozing continued five hours after operation; it was checked by the free use of liquor ferri subsulphatis.

Asst. Surg. H. G. Burton, U. S. Army, also reports in a primary amputation of the ankle joint for shot fracture that there was profuse capillary hemorrhage after the removal of the tourniquet, which was with difficulty controlled; this oozing continued through the night.

Antiseptics.—Antiseptics were employed during surgical operations as follows: Solutions of the mercuric bichloride in 32 cases, carbolic acid in 26, salicylic acid in 2. In 108 cases no antiseptics were used, and in the remaining 16 no information is given as to what substance was employed.

For surgical dressings after operations, solutions of carbolic acid were used in 46 cases, the mercuric bichloride in 26, iodoform in 28, chlorinated soda in 2. In 73 cases antiseptics were used, and in 9 no information was furnished.

Complications.—As complications to shot wounds, there was reported 1 case of chronic tetanus following a wound of the upper extremity, 1 case of acute mania, with amputation of the thigh for shot fracture, 2 cases of partial paralysis following flesh wound of the chest, the loss of sight in one eye from a shot wound of the face. No cases of erysipelas or pyæmia were reported.

Vaccinations.—The following tables, compiled from the monthly consolidated reports of the Medical Department of the Army, show the number of troops vaccinated and revaccinated during the year, with ratios per 100 of successes and failures.

The tables also show comparative results following the use of bovine and humanized virus.

Out of 8,845 vaccinations, there were reported 389 cases in which the conditions produced were of sufficient gravity to cause admission to sick report. No deaths were reported from this cause.

The character of the lesions, in most cases, were normal, although in a few instances, where the bovine virus had been used, the occurrence of great prostration, high fever, diffuse cellulitis, swelling of axillary lymphatics, and erysipelas were reported.

Number and ratio of vaccinations per 100.

[Number of cases reported, 8,845; total primary vaccinations, 1,870; total revaccinations, 7,475.]

Vaccinations.	Successful.		Unsuccessful.		Results not determined.		Successful.		Unsuccessful.		Results not determined.		Total operations performed.
	No.	P. ct.	No.	P. ct.	No.	P. ct.	No.	P. ct.	No.	P. ct.	No.	P. ct.	No.
At recruiting depots:													
Primary vaccinations..... 262 }	109	41.6	135	51.5	18	6.9	532	19.0	1,966	70.4	297	10.6	3,057
Revaccinations 2,795 }													
Army at large:													
Primary vaccinations .. 1,108 }	378	34.1	594	53.6	136	12.3	1,110	23.7	3,045	65.1	525	11.2	5,788
Revaccinations 4,680 }													
Total	487	35.6	729	53.2	154	11.2	1,642	22.0	5,011	67.0	822	11.0	8,845

The following table shows the comparative results of the use of bovine and humanized virus:

[Number of cases reported, 7,588.]

Vaccinations.	Bovine virus (5,845).						Humanized virus (1,743).					
	Primary vaccinations.			Revaccinations.			Primary vaccinations.			Revaccinations.		
	Successful.	Unsuccessful.	Not known.	Successful.	Unsuccessful.	Not known.	Successful.	Unsuccessful.	Not known.	Successful.	Unsuccessful.	Not known.
Cases	336	527	40	1,247	3,204	491	95	140	1	254	1,237	16
Ratio per 100	37.2	58.4	4.4	25.2	64.8	10.0	40.3	59.3	0.4	16.9	82.1	1.0

Recruiting.—There were received during the year very complete monthly reports of the examinations of recruits for the Army from 129 military stations and 25 recruiting rendezvous and depots.

These reports show that there were inspected by medical officers 16,805 applicants for enlistment. Out of the whole number examined, there were accepted into service 7,244 men and rejected on primary inspection 9,561, or about 57 per cent. of all presenting; of all recruits accepted on primary examination, there were rejected on re-examination at depots 56, or eight-tenths of 1 per cent.

For lack of sufficient clerical force, it has been impossible to arrange all the statistical data given upon these reports, but such general facts as relate to the various causes of rejections are herewith submitted.

By far the most frequent causes of non-acceptance were imperfect mental and physical development and general unfitness. For these reasons, there were rejected 1,996 applicants, or about 12 per cent. of all persons presenting. What these terms really imply is best set forth by Surgeon Greenleaf, U. S. Army, in his *Epitome of Tripler's Manual of the Examination of Recruits, 1883*:

We frequently see men whose constitutions may or may not have been originally feeble, but who, from unfavorable hygienic circumstances, have aggravated or acquired this feebleness, debility, or general unfitness. There is partial or general

emaciation, mental sluggishness, a listless air, a torpor of all the faculties, absence of activity, indifference to all their surroundings. Too lazy or too feeble to work, they seek the service as an asylum only, without the least notion of ever performing their duties. Such men are cases for absolute rejection.

Diseases and injuries of the locomotor system, such as curvature of the spine, deformities of the legs and of the feet and toes, diseases and injuries of the joints, &c., furnished 1,190 rejections, or 7 per cent. of all persons examined.

Disease of the organs of circulation furnished 858 rejections, or about 5 per cent.; 9 of these cases were discovered on secondary inspections at recruiting depots. For diseases of the heart and valves there were 237 rejections, and for varicose veins 621.

Diseases of the digestive system contributed 831 rejections, or about 5 per cent., hemorrhoids, the loss of teeth, and hernia being the most frequent causes.

On account of visual defects there were 604 rejections, or about 4 per cent. Under the head of impaired vision alone, there were 485 rejections. Seventy-two men were definitely recorded as myopic, and 5 as astigmatic. One case of color-blindness was discovered.

There were only 22 rejections for defective vision among colored applicants, the ratio being about one-half less than for the white.

Diseases of the urinary and reproductive organs furnished 691 cases; over 500 of these were for varicocele.

The rate among white recruits was considerably higher than among colored, standing as 6 to 4 per 100.

There were 429 syphilitics detected, and 98 persons having other venereal diseases. Relatively the colored applicants furnished the greater number.

For intemperance there were 376 rejections, the rate among white applicants being very nearly four times greater than among the colored.

A detailed exhibit of all causes of rejection during the year will be found attached to this report, Appendix D.

WORK PERFORMED IN THE RECORD AND PENSION DIVISION DURING THE FISCAL YEAR ENDING JUNE 30, 1886.

The total number of official calls upon the Record and Pension Division during the year for information as to the cause of death in cases of deceased soldiers, and for the hospital record of invalids, was 53,352, being 9,344 more than the number of similar applications during the previous year. Including the 3,349 applications remaining unanswered at the end of the last fiscal year, the total number of cases to be disposed of was 56,701.

Of the new cases, 6,037 were received from the Commissioner of Pensions, 44,679 from the Adjutant-General of the Army, and 2,636 from miscellaneous sources. All original calls in pension cases for information regarding deceased or discharged soldiers are now received from, and returned through, the office of the Adjutant-General of the Army.

Replies have been furnished to the proper authorities in 48,120 cases, of which 5,714 were to the Commissioner of Pensions, 40,043 to the Adjutant-General of the Army, and 2,363 to miscellaneous applicants, leaving 8,581 to be searched and reported on. In addition to the number of reports above stated as furnished to the Commissioner of Pensions, 1,759 have been prepared and furnished the same officer by the administrative and miscellaneous branch of the office; making a total of 7,473 furnished to the Pension Office (direct) during the year.

In October, 1885, 10 clerks were detailed from this division for temporary duty in the Adjutant-General's Office to assist in the preparation of pension cases in that office before their transmission to this office. This number was increased in February, 1886, to 20. On the 3d of July, 1886, these clerks were recalled to assist in the preparation of cases remaining unanswered in this office.

During the year, 27,449 folios of worn and dilapidated hospital registers of sick and wounded, containing 814,115 entries, were copied and preserved from destruction; there were also 34,019 entries copied from worn prescription books.

The work of preparing index registers of the lists of wounded in the war of the rebellion (arranged alphabetically and by States) has been practically completed, 39,735 names having been entered during the year.

There were received and filed 44 bound volumes of hospital records during the year; 8 volumes were transmitted to the Adjutant-General, leaving a total of 18,783 volumes on file at the end of the fiscal year.

From the medical officers in charge of military stations and commands, 2,357 consolidated monthly reports were received, upon which are recorded the names and complaints of all officers and enlisted men admitted to treatment during the year. These have been carefully examined, and all missing data necessary to the settlement of pension claims called for by correspondence, the statistical information they contain has been consolidated for reference, and the deaths and discharges for disability entered in alphabetical registers of this office. There were also received and filed 1,341 monthly reports of examinations of recruits, 110 special medical reports, 160 surgical reports, 1,052 monthly sanitary reports, and 7 lists of casualties from commands engaged with hostile Indians during the year.

ARMY MEDICAL MUSEUM.

Pathological Section :

Specimens.

In museum June 30, 1885.....	9, 223
Discarded	76
Received during the year	436
In museum June 30, 1886	9, 583
Section of Comparative Anatomy :	
In museum June 30, 1885	1, 705
Transferred or discarded	115
Received during the year	32
In museum June 30, 1886	1, 622
Anatomical Section :	
In museum June 30, 1885	2, 271
Transferred or discarded	24
Received during the year	98
In museum June 30, 1886	2, 345
Microscopical Section :	
In museum June 30, 1885	9, 103
Received during the year	407
In museum June 30, 1886	9, 510
Miscellaneous Section :	
In museum June 30, 1885	166
Received during the year	180
In museum June 30, 1886	346
Provisional Section :	
Pathological specimens in museum June 30, 1885	137
Received during the year	133
Pathological specimens June 30, 1886	270
Anatomical specimens in museum June 30, 1885	204
Received during the year	69
Anatomical specimens June 30, 1886	273

The total accessions to the museum collection were 1,355 specimens. There were discarded or transferred to other institutions 215 specimens.

Among the important additions to the museum during the year are a series of dissections, illustrating the anatomy of certain regions of the human body, prepared by Dr. Vaughan, under the direction of Professor Cunningham, of Trinity College, Dublin; a series of frozen sections of the human body, prepared under the direction of Professor Braune, of Leipsic; a collection of 171 casts of human jaws, illustrating physiological and pathological dentition, presented by Dr. Samuel Sexton, of New York; a valuable collection of medals issued in commemoration of medical men or of medical events, and a collection of crania of ancient Peruvians from Anson, Peru.

CATALOGUE OF THE MUSEUM.

It is very desirable that a catalogue of the museum should now be published; such a catalogue, with proper illustrations, will make three large volumes, and will be of great benefit to the medical profession as well as to the museum itself. It is respectfully recommended that authority be granted by Congress for printing this work.

LIBRARY.

The following table shows the additions made to the library during the fiscal year:

Description.	On hand, June 30, 1885.	Added dur- ing fiscal year.	Total, June 30, 1886.
Medical journals.....volumes..	23,039	1,077	24,116
Medical transactions.....do...	3,440	92	3,532
Bound theses.....do.....	1,385		1,385
Bound pamphlets.....do.....	1,213	118	1,331
Other medical books.....do...	43,142	3,226	46,368
Total.....	72,219	4,513	76,732
Medical theses.....Number..	40,524	1,688	42,212
Medical pamphlets.....do...	55,399	9,020	64,419
Total.....	95,923	10,708	106,631

Volume VII of the Index Catalogue, including from "Insignarès" to "Leghorn," forming a volume of 1,059 pages, has been printed and the edition distributed. The preparation of the manuscript of Volume VIII is well advanced, and the first part of it is now going to press.

MEDICAL AND SURGICAL HISTORY OF THE WAR.

The publication of the third medical volume, the last of the series composing the Medical and Surgical History of the War, has been delayed by the pressure of current work at the Government Printing Office.

The manuscript was ready for the press in February last, but little progress was made in printing during the continuance of the session of Congress.

At the present date all the plates, diagrams, and other materials for the illustration of the volume are on hand, and page proofs of the first hundred pages of the work have been filed in this office.

HYGIENE OF THE ARMY AND POST SANITATION.

Increased attention to the hygienic needs of the soldier and to the subject of sanitation at all military posts, with gratifying results, is shown in the monthly sanitary reports received at this office, and in the diminished rates of sickness and mortality for the year, demonstrating clearly that the prevention of disease in accordance with an intelligent knowledge of hygienic and sanitary laws is not less important on the part of the medical officer than the ability to treat skillfully existing forms of disease, all of which may be considered to have their origin, more or less remotely, in the violation of natural laws. The cheerful and appreciative co-operation of commanding officers in this matter is also especially gratifying. While some improvement in methods of cooking for soldiers' and hospital messes is observed, there is still a wide field for improvement, and I cannot but urge that means should be devised for the proper instruction of Army cooks, believing it to be essential to the physical and moral well-being of the troops.

During the past year five ice machines have been ordered for posts located in the intensely hot regions of Texas and Arizona; it is hoped and believed that they will secure to the garrisons so situated a much-needed comfort and to the sick an indispensable necessity.

DISABLED MEDICAL OFFICERS.

The number of medical officers permanently disabled is becoming a matter of serious embarrassment to the efficiency of this department. There are now 4 officers who have been recommended for retirement by retiring boards, and at least 6 other officers who can do no more active service. The interests of the department demand that their places should be filled by young and active men, and it is hoped that Congress may be induced to afford relief by special or general legislation.

FAILURE TO APPROPRIATE MONEY FOR COOKS AND NURSES IN POST HOSPITALS.

I would respectfully invite attention to the failure of Congress at its last session to appropriate money for the payment of extra-duty pay to enlisted men detailed as cooks and nurses at post hospitals. As this service is absolutely necessary for the welfare of the sick of the Army, it is hoped that Congress will be pleased to make provision for the payment of such services as may be rendered gratuitously during the current year.

HOSPITAL CORPS.

In view of the failure of the last Congress to appropriate money for the payment of extra-duty pay to enlisted men detailed as cooks and nurses in post hospitals, and the consequent embarrassment to the hospital service; also, in view of the present unsatisfactory and objection-

able system of details for this important service, I would respectfully reiterate the necessity for the organization of a hospital corps, by the enlistment of able-bodied and intelligent men, who shall be thoroughly trained and instructed as cooks, nurses, attendants, and litter and stretcher bearers, thus preparing the Medical Department for any emergency of peace, war, or epidemic.

Similar organizations have been perfected in the armies of the principal European powers, and their usefulness and efficiency have been well and thoroughly tested.

I would strongly recommend the detail of a board of competent medical officers to prepare a plan of organization for a hospital corps suited to the conditions of our Army, with a view to Congressional action.

HOSPITAL STEWARDS.

A bill to increase the efficiency of the hospital stewards of the Army, in accordance with the recommendations made in the last annual report, has passed the Senate and has been favorably reported from the Military Committee of the House of Representatives; while, in my opinion, the compensation allowed this valuable class of non-commissioned officers is rated at too low a figure, it is hoped that this bill will become a law at an early date.

PROVIDENCE HOSPITAL.

Under the provisions of the act of March 3, 1885, making appropriation of \$15,000 "for the support and medical treatment of seventy-five transient paupers, medical and surgical patients, in the city of Washington, under a contract to be made with the Providence Hospital by the Surgeon-General of the Army," a contract was duly entered into with the institution named, and has been fulfilled to my satisfaction and without complaint on the part of the persons sent there for treatment. The following is a statement of the amount of relief afforded under the appropriation:

Number of patients in hospital July 1, 1885.....	78
Number of patients admitted during the year.....	852
Total number of patients treated.....	930
 Average number of patients admitted per month.....	71
Number remaining in hospital June 30, 1886.....	86
Total number of days' treatment afforded.....	30,397
Average number of days' treatment per patient.....	33
Average number of patients treated per day.....	83
Longest term of treatment.....days..	365
Shortest term of treatment.....do..	1
Number of patients in hospital during the whole year.....	19

The patients included in the statement represent all classes of diseases, acute and chronic, except those of a contagious nature. The patients shown as having remained in hospital during the whole year are paupers, incurable, without home or friends.

MISCELLANEOUS.

The requirements of the Army as regards medical officers during the past year have been as follows :

Number of permanent posts	123
Number of temporary posts and substations	70
Total	193
Number of military expeditions in the field during the year	4

The services of 9 medical officers were required with these expeditions; there were also 145 medical officers reported to this office as having been on duty with scouting parties and on other field service during the year.

The Army Medical Examining Board, convened in New York City on the 6th of April, 1885, is still in session for the examination of candidates for admission to the Medical Corps of the Army and of assistant surgeons for promotion. The following is a recapitulation of the work performed by the board during its session :

Assistant surgeons examined for promotion	8
Candidates for appointment in the Medical Corps invited to appear for examination	76
Candidates found qualified	7
Candidates rejected	18
Candidates who withdrew after partial examination	25
Total examined	50
Candidates who failed to appear for examination	10
Candidates who declined to appear for examination	4
Number invited but not examined	26

The names of the approved candidates have been submitted to the Secretary of War for appointment as assistant surgeons, and 5 have thus far received such appointment, leaving 2 to be appointed as vacancies may occur.

Since the date of last report Brig. Gen. Robert Murray, Surgeon-General, and 2 surgeons with the rank of colonel have been retired; 1 surgeon with the rank of major, 1 assistant surgeon with the rank of captain, and 2 surgeons and 1 assistant medical purveyor on the retired list have died; 1 assistant surgeon with the rank of first lieutenant was killed in an affair with Apache Indians in New Mexico; 2 surgeons with the rank of lieutenant-colonel have been promoted to surgeon with the rank of colonel; 2 surgeons with the rank of major have been promoted to surgeon with the rank of lieutenant-colonel, and 3 assistant surgeons with the rank of captain have been promoted to surgeon with the rank of major; 5 appointments in the grade of assistant surgeon have also been made. The only vacancy existing in the Medical Corps is that of Surgeon-General.

There are 11 medical officers on sick leave of absence; of these, 4 have been found incapacitated for active service and recommended for retirement by Army retiring boards, viz: Asst. Surg. James W. Buell,

who has been on sick leave since August 23, 1877; William R. Steinmetz, who has been on sick leave since September 16, 1878; J. V. De Hanne, who has been on sick leave since June 22, 1879, and Asst. Surg. Joseph Y. Porter, who was ordered to his home by Special Orders No. 136, Headquarters of the Army, A. G. O., June 15, 1885; 6 others are regarded as permanently disabled, leaving 183 medical officers for duty.

The medical officers who have died during the year are as follows:

Lieut. Col. and Bvt. Col. James Simons, surgeon (retired), at Baltimore, Md., November 11, 1885.

Lieut. Col. and Bvt. Brig. Gen. Ebenezer Swift, assistant medical purveyor (retired), at Bermuda, December 24, 1885.

Maj. and Bvt. Lieut. Col. Burton Randall, surgeon (retired), at Government Hospital for the Insane, District of Columbia, February 8, 1886.

Maj. Charles E. Goddard, surgeon, at Fort Yates, Dak., January 4, 1886.

Capt. William J. Wilson, assistant surgeon, at Plattsburg Barracks, N. Y., May 2, 1886.

First Lieut. Thomas J. C. Maddox, assistant surgeon, killed, December 19, 1885, in an affair with Apache Indians, near the White House, New Mexico.

J. H. BAXTER,

Acting Surgeon-General, U. S. Army.

APPENDIX A.—*A list of the principal diseases and injuries that have impaired the effective strength of the United States Army during the year, arranged in the order of numerical occurrence.*

[Mean strength: white, 21,944; colored, 2,194; aggregate, 24,138.]

Diseases and injuries.	White.			Colored.			Aggregate.	
	Number of cases reported during the year.	Rate per 1,000 of mean strength reported.	Rate per 1,000 of total cases of diseases and injuries reported.	Number of cases reported during the year.	Rate per 1,000 of mean strength reported.	Rate per 1,000 of total cases of diseases and injuries reported.	Rate per 1,000 of mean strength reported.	Rate per 1,000 of total cases of diseases and injuries reported.
Wounds, injuries, and accidents, of which 58 per cent. white and 46 per cent. colored were contusions and sprains.....	5,286	241	178	662	302	201	246	180
Diarrheal diseases.....	3,537	161	119	434	198	131	165	120
Diseases of the respiratory system.....	3,850	153	113	443	202	134	157	115
Catarrh and common colds*.....	1,686	77	57	218	99	66	79	58
Bronchitis*.....	1,323	60	45	160	73	48	61	45
Inflammation of lungs*.....	81	4	3	8	4	2	4	3
Pulmonary phthisis*.....	59	3	2	6	3	2	3	2
Inflammation of pleura*.....	38	2	1	5	2	2	2	1
Diseases of the digestive system (exclusive of tonsillitis).....	2,791	127	94	320	146	97	129	94
Malarial fever and resulting conditions.....	2,601	119	88	318	145	96	121	88
Rheumatism.....	1,880	86	63	237	108	72	88	64
Headache, neuralgia, and other nervous diseases (exclusive of insanity).....	1,705	78	57	214	98	65	80	58
Alcoholic inebriation, acute and chronic, and results.....	1,284	59	43	8	4	2	54	39
Veneral diseases (exclusive of syphilis).....	1,205	55	41	118	54	36	55	40
Tonsillitis.....	956	44	32	125	57	38	45	33
Boils.....	671	31	23	45	21	14	30	22
Diseases of the integumentary system.....	567	26	19	29	13	9	25	18
Syphilis and results.....	551	25	19	49	22	15	25	18
Abscesses, ulcers, and whitlows.....	490	22	17	51	23	15	22	16
Diseases of the eye.....	429	20	14	58	26	18	20	15
Vaccina.....	348	16	12	41	19	12	16	12
Diseases of the urinary and genital organs (exclusive of Bright's disease).....	308	14	10	35	16	11	14	10
Simple, ephemeral, and catarrhal fevers.....	281	13	9	7	3	2	12	9
Diseases of the ear.....	223	10	8	6	3	2	9	7
Diseases of the heart.....	148	7	5	11	5	3	7	5
Diseases of bones and joints.....	106	5	4	16	7	5	5	4
Constitutional diseases (exclusive of rheumatism).....	76	3	3	7	3	2	3	3
Enteric fever.....	73	3	2	3	1	0.9	3	2
Erysipelas.....	69	3	2	2	0.9	0.6	3	2
Dengue.....	57	3	2	0			2	2
Venomous bite, sting, or wound..	53	2	2	6	3	2	2	2
Heat-stroke.....	49	2	2	0			2	1
Mumps.....	43	2	1	7	3	2	2	2
Diseases of the nose.....	35	2	1	5	2	2	2	1
Measles.....	34	2	1	2	0.9	0.6	1	1
Insanity.....	32	1	1	2	0.9	0.6	1	1
Diphtheria.....	32	1	1	0			1	1
Diseases of the fascia, tendons and muscles.....	28	1	0.9	5	2	2	1	1
Diseases of the circulatory system (exclusive of heart disease).....	22	1	0.7	1	0.5	0.3	1	0.7
Bright's disease.....	20	0.9	0.7	3	1	0.9	1	0.7
Typho-malarial fevers.....	17	0.8	0.6	1	0.5	0.3	0.7	0.5
Other diseases.....	332	15	11	30	14	9	15	11
Grand total.....	29,689	1,353	1,000	3,801	1,505	1,000	1,367	1,000

*Included among diseases of the respiratory system and not repeated in the grand total

APPENDIX B.—Table of deaths and discharges for disability in the United States Army, together with the ratio to 1,000 of mean strength and to 1,000 cases of each disease reported during the year

Diseases and injuries.	DEATHS.						DISCHARGES.					
	White.			Colored.			White.			Colored.		
	Number.	Ratio per 1,000 of mean strength.	Ratio per 1,000 of cases.	Number.	Ratio per 1,000 of mean strength.	Ratio per 1,000 of cases.	Number.	Ratio per 1,000 of mean strength.	Ratio per 1,000 of cases.	Number.	Ratio per 1,000 of mean strength.	Ratio per 1,000 of cases.
GENERAL DISEASES.												
ZYMOTIC DISEASES.												
<i>Miasmatic diseases.</i>												
Total	25	1.14	4	1	.46	1	15	.68	2			
Diphtheria	1	.05	31									
Enteric fever	9	.41	123				2	.09	27			
Scarlet fever	1	.05	500									
Malarial fever, continued ..	1	.05	63									
Remittent fever	2	.09	5	1	.46	125						
Other malarial diseases							2	.09	10			
Typho-malarial fever	3	.14	176									
Diarrhea, chronic							8	.36	167			
Dysentery, acute	5	.23	25				1	.05	5			
Dysentery, chronic	1	.05	59				2	.09	118			
Erysipelas	1	.05	14									
Pyæmia	1	.05	500									
<i>Enthetic diseases.</i>												
Total	1	.05	.46				98	4.47	45	6	2.73	28
Gonorrhea and results							7	.32	8	1	.46	12
Syphilis and results							84	3.83	152	5	2.28	102
Venereal epididymitis and orchitis ..												
Venereal bubo							5	.23	39			
Other venereal diseases							1	.05	24			
Splenic fever (anthrax)	1	.05	1,000				1	.05	33			
DIETIC DISEASES.												
Total	4	.18	3				12	.55	9			
Alcoholism and results.	4	.18	3				12	.55	10			
CONSTITUTIONAL DISEASES.												
Total	5	.23	5	1	.46	6	70	3.19	64	9	4.10	53
Anæmia	1	.05	40				5	.23	200			
Cancer	1	.05	(*)				1	.05	(*)			
Diabetes	2	.09	143				3	.14	214	1	.46	1,000
Rheumatic fever and results ..	1	.05	13	1	.46	250	3	.14	38			
Other rheumatisms							53	2.42	57	5	2.28	31
Scrofula							1	.05	233			
Tuberculosis							4	.18	1,000			
Tumors										1	.46	(*)
Other diseases of this class ..										1	.46	(*)
DEVELOPMENTAL DISEASES.												
Total							14	.64	(*)	1	.46	(*)
Imperfect mental development ..							3	.14	1,000	1	.46	(*)
Imperfect physical development ..							2	.09	1,000			
Old age and results							9	.41	(*)			

* The number of deaths and discharges in these cases exceeds the number admitted to sick report during the year. This excess is due to cases being carried forward from the previous year and to deaths and discharges occurring among persons not on sick report.

APPENDIX B.—Table of deaths and discharges for disability, &c.—Continued.

Diseases and injuries.	DEATHS.						DISCHARGES.					
	White.			Colored.			White.			Colored.		
	Number.	Ratio per 1,000 of mean strength.	Ratio per 1,000 of cases.	Number.	Ratio per 1,000 of mean strength.	Ratio per 1,000 of cases.	Number.	Ratio per 1,000 of mean strength.	Ratio per 1,000 of cases.	Number.	Ratio per 1,000 of mean strength.	Ratio per 1,000 of cases.
DISEASES OF SPECIAL PARTS OR LOCAL DISEASES.												
DISEASES OF THE NERVOUS SYSTEM.												
Total.....	9	.41	5				99	4.51	57	14	6.38	65
Apoplexy.....	5	.23	(*)				1	.05	1,000			
Chorea.....							24	1.09	324	7	3.19	700
Epilepsy.....							7	.32	875			
Mental debility.....							34	1.55	(*)	2	.91	1,000
Insanity.....							6	.27	545			
Other diseases of the brain.....	1	.05	91				4	.18	4			
Neuralgia.....							9	.41	500	3	1.87	750
Paralysis.....	2	.09	111									
Tetanus.....	1	.05	1,000				4	.18	800			
Locomotor ataxia.....							1	.05	833			
Diseases of the spinal cord.....							9	.41	115	2	.91	286
Other diseases of this class.....												
DISEASES OF THE ORGANS OF SPECIAL SENSE.												
<i>Diseases of the eye.</i>												
Total.....							43	1.90	100	3	1.37	52
Cataract.....							3	.14	1,000			
Conjunctivitis, purulent.....							1	.05	4			
Conjunctivitis, chronic.....							7	.32	700			
Corneitis.....							1	.05	250			
Corneal ulcer.....							1	.05	250			
Lids, diseases of.....							2	.09	56			
Neuroretinitis.....							1	.05	333			
Retina, other diseases of.....							4	.18	571			
Amblyopia.....							3	.14	500			
Asthenopia.....							1	.05	333			
Astigmatism.....							2	.09	500			
Hypermetropia.....							1	.05	250			
Myopia.....							8	.36	667			
Presbyopia.....							1	.05	1,000			
Loss of vision.....							5	.23	(*)	2	.91	(*)
Other diseases of the eye.....							2	.09	71	1	.46	200
<i>Diseases of the ear.</i>												
Total.....	1	.05	4				24	1.09	108			
<i>Diseases of the middle and internal ear.</i>												
Deafness.....	1	.05	14				10	.46	141			
							14	.64	778			
<i>Diseases of the nose.</i>												
Total.....							4	.18	114			
Nasal catarrh, chronic.....							3	.14	176			
Nasal polypus.....							1	.05	500			

*The number of deaths and discharges in these cases exceeds the number admitted to sick report during the year. This excess is due to cases being carried forward from the previous year, and to deaths and discharges occurring among persons not on sick report.

APPENDIX B.—Table of deaths and discharges for disability, &c.—Continued.

Diseases and injuries.	DEATHS.						DISCHARGES.					
	White.			Colored.			White.			Colored.		
	Number.	Ratio per 1,000 of mean strength.	Ratio per 1,000 of cases.	Number.	Ratio per 1,000 of mean strength.	Ratio per 1,000 of cases.	Number.	Ratio per 1,000 of mean strength.	Ratio per 1,000 of cases.	Number.	Ratio per 1,000 of mean strength.	Ratio per 1,000 of cases.
DISEASES OF SPECIAL PARTS OR LOCAL DISEASES—Continued.												
DISEASES OF THE RESPIRATORY SYSTEM.												
Total.....	33	1.50	10	2	.91	5	68	3.10	20	4	1.83	9
Asthma, nervous.....							4	.18	70			
Bronchitis.....	3	.14	2				8	.36	6			
Larynx, diseases of.....							1	.05	16			
Pulmonary abscess.....	1	.05	1,000				2	.09	125			
Pulmonary hemorrhage.....	1	.05	63				2	.14	810	3	1.37	500
Pulmonary phthisis.....	11	.50	190	2	.91	333	47	2.09	25			
Pneumonia and results.....	17	.77	210				2	.09	53	1	.46	200
Pleuritis and results.....							2	.09	105			
Other diseases of this class.....							2	.09				
DISEASES OF THE CIRCULATORY SYSTEM.												
Total.....	8	.36	47				54	2.46	318	7	3.19	583
Angina pectoris.....										1	.46	(*)
Cardiac dilatation.....							3	.14	1,000			
Cardiac degeneration.....							2	.09	1,000			
Cardiac hypertrophy.....							3	.14	750			
Cardiac irritability.....							6	.27	109	2	.91	500
Endocarditis and results.....							2	.09	500			
Pericarditis and results.....							1	.05	167			
Valvular disease and results.....	6	.27	167				29	1.32	806	3	1.37	429
Other diseases of the heart.....							4	.18	182			
Aneurism.....							3	.14	750			
Arterial embolism.....	2	.09	(*)									
Varicose veins.....							1	.05	77	1	.46	1,000
DISEASES OF THE DIGESTIVE SYSTEM.												
Total.....	11	.50	3				39	1.78	10	3	1.37	7
Diseases of the teeth, gums, and alveolus.....							2	.09	9			
Dyspepsia.....							4	.18	9			
Gastric ulcer.....							1	.05	250			
Gastritis.....	1	.05	17				1	.05	17			
Enteritis.....	2	.09	100									
Fistula in ano.....							1	.05	67			
Homorrhoids.....							4	.18	14	1	.46	26
Hernia, inguinal.....							17	.77	336	2	.91	500
Other hernias.....							2	.09	667			
Intestinal ulcer.....							2	.09	182			
Rectal abscess.....							1	.05	143			
Other diseases of the intestines.....							1	.05	167			
Jaundice, catarrhal.....							1	.05	29			
Hepatic abscess.....	5	.23	(*)									
Hepatic cirrhosis.....	2	.09	500									
Biliary calculi.....							1	.05	500			
Peritonitis and results.....	1	.05	125				1	.05	125			

* The number of deaths and discharges in these cases exceeds the number admitted to sick report during the year. This excess is due to cases being carried forward from the previous year, and to deaths and discharges occurring among persons not on sick report.

APPENDIX B.—Table of deaths and discharges for disability, &c.—Continued.

Diseases and injuries.	DEATHS.						DISCHARGES.					
	White.			Colored.			White.			Colored.		
	Number.	Ratio per 1,000 of mean strength.	Ratio per 1,000 of cases.	Number.	Ratio per 1,000 of mean strength.	Ratio per 1,000 of cases.	Number.	Ratio per 1,000 of mean strength.	Ratio per 1,000 of cases.	Number.	Ratio per 1,000 of mean strength.	Ratio per 1,000 of cases.
DISEASES OF SPECIAL PARTS OR LOCAL DISEASES—Continued.												
DISEASES OF THE LYMPHATIC SYSTEM AND DUCTLESS GLANDS.												
Total				1	.46	111	3	.14	25	1	.46	111
Adenitis							1	.05	9	1	.46	125
Lymphatic hypertrophies ..							1	.05				
Goiter							1	.05	1,000			
Other diseases of this class ..				1	.46	1,000						
DISEASES OF THE URINARY AND GENITAL ORGANS.												
Total	10	.46	30	2	.91	53	42	1.91	128	3	1.37	79
Bright's disease ..	5	.23	625	1	.46	(*)	5	.23	625			
Nephritic abscess ..	1	.05	(*)									
Nephritis, acute tubular ..	1	.05	100				1	.05	100			
Nephritis, chronic interstitial ..	2	.09	(*)	1	.46	500						
Other diseases of the kidney ..	1	.05	91									
Cystitis							8	.38	174			
Vesical incontinence ..							4	.18	211			
Urethral stricture ..							16	.73	262	2	.01	286
Orchitis, non-venereal ..							3	.14	39			
Spermatorrhea							1	.05	333			
Varicocele							3	.14	136			
Other diseases of the testicles, cord, scrotum, and penis							1	.05	56	1	.46	250
DISEASE OF THE LOCOMOTOR SYSTEM.												
Total							33	1.50	33	3	1.37	32
Arthritis and results ..							4	.18	364	1	.46	200
Osteitis and results ..							2	.09	667	1	.46	(*)
Periostitis and results ..							2	.09	167			
Synovitis and results ..							10	.46	236			
Malformation foot and toes ..							2	.09	(*)			
Myalgia and muscular rheumatism ..							2	.09	2			
Other diseases of this class ..							11	.50	244	1	.46	143
DISEASES OF THE INTEGUMENTARY SYSTEM.												
Total							12	.55	7	1	.46	8
Abscess							1	.05	4	1	.46	32
Corn							1	.05	29			
Eczema							6	.23	72			
Psoriasis							1	.05	111			
Ulcer							1	.05	8			
Other diseases of this class ..							3	.14	20			

*The number of deaths and discharges in these cases exceeds the number admitted to sick report during the year. This excess is due to cases being carried forward from the previous year, and to deaths and discharges occurring among persons not on sick report.

APPENDIX B.—Table of deaths and discharges for disability, &c.—Continued.

Diseases and injuries.	DEATHS.						DISCHARGES.					
	White.			Colored.			White.			Colored.		
	Number.	Ratio per 1,000 of mean strength.	Ratio per 1,000 of cases.	Number.	Ratio per 1,000 of mean strength.	Ratio per 1,000 of cases.	Number.	Ratio per 1,000 of mean strength.	Ratio per 1,000 of cases.	Number.	Ratio per 1,000 of mean strength.	Ratio per 1,000 of cases.
DISEASES OF SPECIAL PARTS OR LOCAL DISEASES—Continued.												
INJURIES.												
Total	35	1.59	7	5	2.28	8	61	2.78	12	8	3.65	12
<i>General injuries.</i>												
Crushing	1	.05		2	.91							
Drowning	11	.50										
Freezing	3	.14										
Heat-stroke							1	.05	20			
Poison, exclusive of disease	3	.14	231									
Suffocation, exclusive of disease	1	.05										
<i>Local injuries.</i>												
Concussion of the brain, results of	1	.05	111				2	.09	222			
Contusions and sprains, results of							11	.50	4	1	.46	3
Dislocations, results of							3	.14	51			
Fractures, not gunshot, results of							15	.68	100			
Frostbite, results of	1	.05	11				3	.14	32	1	.46	17
Wounds, incised, results of							2	.09	5	1	.46	14
Wounds, lacerated, results of							2	.09	6			
Wounds, punctured, results of				1	.46	(*)						
Wounds, gunshot, results of	14	.64	131	2	.91	83	17	.77	159	5	2.28	208
Other local injuries							5	.23	79			
Homicide	9	.41		2	.91							
Suicide	16	.73										
<i>Unclassified.</i>												
Disease	1	.05					1	.05	(*)			
Masturbation							2	.09	(*)			
Total	1	.05					3	.14	(*)			
Aggregate	168	7.66	6	14	6.38	4	694	31.63	23	63	28.71	19

* The number of deaths and discharges in these cases exceeds the number admitted to sick report during the year. This excess is due to cases being carried forward from the previous year and to deaths and discharges occurring among persons not on sick report.

NOTE.—Cases of injury or disease occurring among recruits at depots which existed or were contracted prior to enlistment are excluded from this table.

Indian scouts.—One died of acute dysentery, or 4 per 1,000 of strength, and 5 of gunshot wounds, or 20 per 1,000 of strength.

South Atlantic region.

Saint Augustine, Fla.....	95	3	3	109	53	162	165	1,705	44	3	32	2	21	6	51	506		
Total strength, admissions, &c	95	3	3	109	53	162	165	1,705	44					6			944	
Total deaths												2	21			506		
Total discharges										3	32				51		19	12

Gulf region.

Fort Brown, Tex	127	12	1	13	87	190	277	290	2,181	79	9	71	2	16	11	76	59	
Mount Vernon Barracks, Ala	74	4		4	41	91	132	136	1,784	48	4	54			10	40		
Jackson Barracks, La.....	81	7		7	41	60	101	108	1,247	66	6	74	1	12	14	83		
New Orleans, La	7				3		3	429	21						19			
Fort Barrancas, Fla., and Camp Mitchell, Pa.....	93	4	3	7	147	20	167	174	1,796	45	2	22	1	11	6	93	22	
Total strength, admission, &c	382	27	4	31	319	361	680	711	1,780	61					10		966	
Total deaths												4	10					
Total discharges										21		55				73	35	6

North Pacific coast region.

Fort Townsend, Wash	69	1		1	56	44	100	101	1,449	36					9			
Fort Canby, Wash	77	3	2	5	11	14	25	30	325	15	1	13	1	13	17	112	23	
Vanconver Barracks, Wash.....	576	14	7	21	291	91	382	403	663	26	17	30	2	3	13	100	47	
Fort Gaston, Cal	39	1		1		13	13	14	333	14	3	77			13			
Benicia Barracks and Arsenal, Cal.....	122	4	1	5	59	36	95	100	779	31	4	33			19	22		
Angel Island, Cal	133	1	1	2	8	67	75	77	564	15	2	15	1	8	9	81	19	
Alcatraz Island, Cal	105	4	1	5	25	59	84	89	800	21	1	10	1	10	7	111		
Presidio of San Francisco, Cal.....	296	13	8	21	142	183	325	346	1,098	41	8	27	4	14	12	98	41	
Fort Mason, Cal	42	1	1	2	23	5	28	30	667	25	3	71			8	113		
Fort Winfield Scott, Cal	101		1	1	104		104	105	1,030	21	1	10	1	10	6	31		
Total strength, admissions, &c	1,560	42	22	64	719	512	1,231	1,295	789	27					11		980	
Total deaths												10	6					
Total discharges										40	2	26				98	30	8

North Pacific river region.

Fort Walla Walla, Wash	288	4	2	6	10	146	156	162	542	17	5	17	3	10	11		20	
Total strength, admissions, &c	288	4	2	6	10	146	156	162	542	17					11			
Total deaths													3	10			994	
Total discharges										5		17					20	19

South Pacific coast region.

San Diego Barracks, Cal	45	6		6	19	26	45	51	1,060	132	3	67	4	89	23	100	99	
Total strength, admissions, &c	45	6		6	19	26	45	51	1,000	132					23		844	
Total deaths													4	89				
Total discharges										3		67				100		89

APPENDIX C.—Wherein are given for the year 1885 all military stations, their mean strength of command, &c.—Continued.

Station.	Mean strength of com- mand.	Remaining at end of last year.			Number of ad- missions.			Aggregate.	Admission rate per 1,000 of mean strength.	No. troops per 1,000 of mean strength constantly non-effective from sickness.	Discharged for disability.	Discharged by order.	Annual rate per 1,000 of mean strength dis- charged for disability.	Number of deaths.	Annual death rate to 1,000 of mean strength.	Average duration of treat- ment among patients re- covered.	Average duration of treat- ment among patients dis- charged for disability.	Average duration of treat- ment among patients died.	Rate per 1,000 of recover- ies to whole number ad- mitted.	Rate per 1,000 of dis- charges for disability to whole number admitted.	Rate per 1,000 of deaths to whole number ad- mitted.
		Diseases.	Injuries.	Total.	To quarters.	To hospital.	Total.														
Lake region.																					
Fort Brady, Mich.....	77	2	3	5	89	11	100	105	1,299	30	2		26	1	13	Days.	Days.	Days.			
Fort Mackinac, Mich.....	80		2	2	26	35	61	63	762	16	1		12			7	88				
Fort Wayne, Mich.....	173	5		5	101	85	186	191	1,075	28	2		12			8	47				
Fort Niagara, N. Y.....	76		1	1	44	9	53	54	697	14						9					
Fort Porter, N. Y.....	84	5	1	6	30	62	92	98	1,095	42	7		83	1	12	10	39	53			
Fort Ontario, N. Y.....	41	1		1	24	22	46	47	1,122	25	4		93	1	24	9	5	12			
Madison Barracks, N. Y.....	235	8	3	11	191	134	325	336	1,883	32	3		13	1	4	8	41				
Plattsburg Barracks, N. Y.....	43	1		1	6	16	22	23	512	11											
Headquarters Department Missouri, Chicago, Ill.....	57	2		2	4		4	6	70	18						87					
Total strength, admissions, &c.....	866	24	10	34	515	374	889	923	1,027	27						9			984		
Total deaths.....														4	5			16			
Total discharges.....											19		22				50			21	4
River region north.																					
Poplar River Camp, Mont.....	98	2	1	3	99	67	166	169	1,694	47	3		31			8	113				
Fort Buford, Dak.....	313	7	7	14	156	111	267	281	853	29	3		10	1	3	13	44	7			
Fort Custer, Mont.....	471	22	5	27	458	243	701	728	1,488	42	19		40	5	11	9	75	24			
Fort Keogh, Mont.....	423	18	7	25	269	164	433	458	1,024	34	11		26	5	12	11	84	21			
Fort Abraham Lincoln, Dak.....	202	8	1	9	193	159	352	331	1,594	40	4		20	1	5	7	88	15			
Fort Yates, Dak.....	248	6	4	10	89	129	218	223	870	24	12		48	1	4	7	59				
Fort Bennett, Dak.....	50	1	2	3	43	7	50	53	1,000	22						8					
Fort Sully, Dak.....	188	5	2	7	90	124	214	221	1,138	45	7		37	1	5	9	51	343			
Fort Randall, Dak.....	171	3	3	6	131	105	236	242	1,380	38						10					
Fort Pembina, Dak.....	85	2	3	5	28	107	135	140	1,588	41						10					
Fort Totten, Dak.....	178	2	3	5	97	150	247	252	1,388	20	5		28			6	51				
Fort Sisseton, Dak.....	87	4	2	6	91	58	149	155	1,713	46	3		34	1	11	8	44	8			
Fort Snelling, Minn.....	205	10	8	18	150	174	324	337	1,098	32	12		41	2	7	10	50	9			
Headquarters Department of Dakota, Fort Snelling, Minn.....	18																				

Fort Omaha, Nebr.	375	13	1	14	356	132	488	502	1,301	41	14	37	1	3	9	90	33		
Headquarters Department of the Platte, Omaha, Nebr.	33				21		21	21	636	8			2	61	6		8		
Fort Leavenworth, Kans. (post)	594	26	7	33	374	476	850	883	1,431	45	12	20	4	7	10	90	80		
Fort Leavenworth, Kans. (prison guard)	106	2		2	26	55	81	83	764	13		9			6				
Leavenworth, Kans.	23				16		16	16	696	23	2	87			12	23			
Fort Riley, Kans.	216	11	1	12	210	98	366	318	1,417	41	8	37	3	14	13	96	7		
Fort Riley, Kans.	96	12		12	28	60	88	100	917	27	3	31	2	21	9	100			
Fort Lyon, Colo.	164	9	4	13	87	108	195	208	1,159	37	4	24	1	6	10	83			
Rock Island Arsenal, Ill.	60	3		3	108	6	114	117	1,900	22	1	17			4	39			
Jefferson Barracks, Mo.	557	34	3	37	1,392	343	1,735	1,772	3,115	83	16	4	29	8	14	8	89	34	
Indianapolis Arsenal, Ind.	27	1		1	90	2	92	93	3,407	69	3	111			5	48			
Newport Barracks, Ky.	46	1		1	31	1	32	33	696	23		1			11				
Columbus Barracks, Ohio.	447	29	2	31	137	682	819	850	1,832	82	26	6	58	1	2	16	63	21	
Allegheny Arsenal, Pa.	27	1		1	20	2	23	23	815	21					15				
Watervliet Arsenal, N. Y.	35	2		2	71	4	75	77	2,143	19					2	57	3		
Temporary camps	102		1	1	178	15	163	194	1,892	34					2	20	6		

Total strength, admissions, &c.

Total deaths

Total discharges

River region south.

Fort Elliott, Tex.	173	4	4	8	16	38	84	92	486	18	2	12			13	32			
Fort Supply, Ind. T.	250	14	10	24	242	163	405	429	1,020	63	10	40	2	8	13	56	27		
Fort Reno, Ind. T.	258	9	7	16	326	101	517	513	2,004	56	12	47			11	73			
Fort Sill, Ind. T.	194	17	4	21	286	143	429	450	2,211	53	3	1	15	3	15	9	98	83	
Fort Gibson, Ind. T.	187	3	1	4	93	153	240	250	2,828	57	2	23	2	23	7	32			
San Antonio, Tex.	263	3	2	5	36	304	340	345	1,293	35	7	27	2	8	8	46	1		
Fort McIntosh, Tex.	140			7	23	170	193	200	1,879	53	4	29			12	109			
Fort Ringgold, Tex.	184	9	7	16	154	270	424	440	2,304	76	8	43	2	11	11	77	43		
Little Rock Barracks, Ark.	107	2		2	41	69	110	112	1,028	53	5	1	47	2	19	14	109	9	
Augusta Arsenal, Ga.	21	1		1	25		25	26	1,190	26					8				
Temporary camps	190				183	7	190	190	1,000	23					7				

Total strength, admissions, &c.

Total deaths

Total discharges

North plateau and mountain region.

Fort Colville, Wash.	6																		
Fort Missoula, Mont.	171	4	1	5	120	235	355	380	2,076	32	2	12	1	6	8	114			
Fort Shaw, Mont.	207	6	7	13	335	41	376	389	1,816	43	9	43	1	5	7	76	7		
Fort Assiniboine, Mont.	473	17	4	21	662	246	908	929	1,920	54	7	15	1	2	10	72			
Fort Ellis, Mont.	143	8	1	9	131	79	210	219	1,469	35	13	91			7	47			
Fort Laramie, Wyo.	260	2	2	4	100	64	164	168	631	18	6	23			10	59			
Fort Robinson, Nebr.	175	12	5	17	164	63	227	244	1,297	64	5	29	1	6	8	177	10		
Fort Niobrara, Nebr.	206	7	2	9	129	60	180	198	917	38	5	24			13	33			
Fort D. A. Russell, Wyo.	356	11	4	15	103	207	310	325	871	37	13	37	2	6	10	103	66		
Fort Sidney, Nebr.	198	12	1	13	313	102	415	428	2,096	48	7	35	1	5	7	92			

APPENDIX C.—Wherein are given for the year 1885 all military stations, their mean strength of command, &c.—Continued.

Station.	Mean strength of com- mand.	Remaining at end of last year.			Number of admis- sions.			Aggregate.	Admission rate per 1,000 of mean strength.	No. troops per 1,000 of mean strength constantly non- effective from sickness.	Discharged for disability.	Discharged by order.	Annual rate per 1,000 of mean strength dis- charged for disability.	Number of deaths.	Annual death rate to 1,000 of mean strength.	Average duration of treat- ment among patients re- covered.	Average duration of treat- ment among patients dis- charged for disability.	Average duration of treat- ment among patients died.	Rate per 1,000 of recover- ies to whole number ad- mitted.	Rate per 1,000 of dis- charges for disability to whole number admitted.	Rate per 1,000 of deaths to whole number ad- mitted.
		Diseases.	Injuries.	Total.	To quarters.	To hospital.	Total.														
North plateau and mountain region—Continued.																					
Fort Bridger, Wyo.....	158	10	2	12	112	47	159	171	1,006	48	16	1	101	2	13	Days.	Days.	Days.			
Fort Douglas, Utah.....	442	14	4	18	150	320	470	488	1,063	36	22		50	3	7	16	61	8			
Fort McDermitt, Nev.....	39	1		1	59	12	71	72	1,821	27	4		103			11	53	47			
Fort Fred Steele, Wyo.....	124	2		2	116	36	152	154	1,226	35	2		16	1	8	5	15				
Fort Spokane, Wash.....	195	9	3	12	50	106	156	168	800	38	3		15	3	15	10	133				
Fort Klamath, Oreg.....	109	6	1	7	73	49	122	129	1,119	52	6		55			13	78				
Fort Cœur d'Alene, Idaho.....	261	10	2	12	188	93	281	293	1,077	31	11		42			12	143				
Fort Maginnis, Mont.....	232	7	7	14	135	128	263	277	1,134	56	9	1	39			9	105				
Fort McKinney, Wyo.....	267	18	11	29	538	102	640	669	2,397	58	12	1	45	2	7	14	101	72			
Fort Meade, Dak.....	519	10	10	20	128	325	453	473	873	31	13		25	4	8	7	113	72			
Fort Washakie, Wyo.....	112	1	3	4	101	42	143	147	1,277	34						10	85	19			
Cantonment Uncompahgre, Colo.....	83	4	1	5	26	83	109	114	1,313	28	2		24	1	12	9	43	65			
Fort Lewis, Colo.....	361	22	4	26	221	325	546	572	1,512	51	7	1	19	2	6	8	145	4			
Fort Halleck, Nev.....	41				27	8	35	35	854	10	2		49			4					
Boisé Barracks, Idaho.....	104	5	4	9	83	25	108	117	1,038	32	2	1	19	2	19	8	105	1			
Fort Bidwell, Cal.....	90	4	1	5	70	55	125	130	1,389	36	1		11			8	340				
Temporary camps.....	109				118		118	118	1,083	16						4					
Total strength, admissions, &c.....	5,441	202	80	282	4,262	2,853	7,105	7,387	1,306	40						9		23	976		
Total deaths.....																					
Total discharges.....											179	5	33				87		25		4
South plateau and mountain region.																					
Fort Mojave, Ariz.....	45	1		1	41	12	53	54	1,178	26				1	22	7		1			
Whipple Barracks, Ariz.....	132	1	2	3	181	100	281	234	1,750	34	1		8	5	38	7		24			
Fort McDowell, Ariz.....	83	5	1	6	54	17	71	77	855	33	4		48			10					
Fort Lowell, Ariz.....	103	5	8	13	113	68	181	189	1,757	78	10	1	97			10	126				
Fort Grant, Ariz.....	239	9	10	19	240	106	346	365	1,448	45	7		29	1	4	8	139				
Fort Bliss, Tex.....	95	4	1	5	125	95	220	225	2,316	52	3	1	39	2	11	11	64	109			
Camp Rice, Tex.....	52	1	1	2	69	20	89	91	1,712	54	2		2			6	165	4			
Fort Davis, Tex.....	275	22	6	28	388	206	594	622	2,160	79	21		38	1	19	8	130				
Fort Stockton, Tex.....	182	5	1	6	86	62	148	154	1,121	67	3		76			10	80				
Pena Colorado, Tex.....	47	3	2	5	23	23	46	51	979	27			23	1	8	18	104	43			

Fort Concho, Tex.....	270	7	5	12	148	203	351	363	1,300	49	3	11	8	11	11	118	12		
Camp Del Rio, Tex.....	57	1		1	22	36	58	59	1,018	25					9				
Fort Clark, Tex.....	449	21	8	29	579	350	929	958	2,069	57	15	2	33	6	13	8	54	12	
Camp at Langtry, Tex.....	28				24	1	25	25	893	22				1	36	8	12		
Fort Union, N. Mex.....	158	5	1	6	96	46	142	148	899	32	3		19	1	6	9	150		
Fort Marcy, N. Mex.....	71		1	1	39	30	69	70	972	19	2		28	1	14	6	83	8	
Fort Wingate, N. Mex.....	310	14	8	22	341	208	549	571	1,771	50	16		52			9	72		
Fort Verde, Ariz.....	124	2	1	3	135	45	180	183	1,452	29	5		40	1	8	5	78		
Fort Apache, Ariz.....	169	2	2	4	79	80	159	163	941	26	5		30	1	6	9	96	1	
San Carlos, Ariz.....	54	2	1	3	20		20	23	370	14						14			
Fort Thomas, Ariz.....	129	7	1	8	158	59	217	225	1,682	49	4		31			9	137		
Fort Bowie, Ariz.....	136	1	1	2	39	61	100	102	735	38	2		15	1	7	17	8		
Fort Huachuca, Ariz.....	182	7	4	11	92	97	189	200	1,038	48	10		55	2	11	11	120	15	
Fort Bayard, N. Mex.....	229	8	1	9	151	121	272	281	1,188	46	10	1	44	6	26	13	58	13	
Fort Selden, N. Mex.....	52		1	1	52	24	76	77	1,462	37	3		58			7	49		
Fort Stanton, N. Mex.....	204	12	9	21	44	154	198	219	971	39	8		39	2	10	12	102	1	
South Fork, N. Mex.....	6				5		5		833	12						4			
Temporary camps.....	229				193	3	196	196	856	20				7	31	8	2		
Total strength, admissions, &c.....	4,060	145	71	216	3,487	2,227	5,714	5,930	1,407	45					10		973		
Total deaths.....																			
Total discharges.....										137	5	34	42	10		90	13	24	7
In the field and en route.....	1,074				534	18	552	552	514	11	1		1	8	7	6	7		
Total strength, admissions, &c.....	1,074				534	18	552	552	514	11					6		938		
Total deaths.....																			
Total discharges.....										1		1	8	7		16	7	2	14
Deaths at large.....														6					
Discharges at large.....										37									
Military departments.																			
Department of the East.....	Cases.....	4,852	193	34	227	4,252	3,340	7,592	7,819	1,565	45					9			
	Deaths.....													41	8		44		
	Discharges.....																		
Department of Texas.....	Cases.....	2,142	91	83	124	1,662	1,852	3,514	3,638	1,641	55	195	18	40		66			
	Deaths.....																		
	Discharges.....											72	2	34		77			
Department of the Missouri.....	Cases.....	5,190	215	69	284	4,977	2,970	7,947	8,231	1,531	44					9			
	Deaths.....																		
	Discharges.....											131	8	25		83			
Department of Dakota.....	Cases.....	4,620	142	73	215	3,419	2,652	6,071	6,286	1,314	38					9			
	Deaths.....																		
	Discharges.....											132	1	29		71			
Department of the Platte.....	Cases.....	2,924	102	35	137	2,397	1,175	3,572	3,709	1,222	39					9			
	Deaths.....																		
	Discharges.....											102	2	35		83			
Department of Arizona.....	Cases.....	1,875	42	26	68	1,359	649	2,008	2,076	1,071	33					9			
	Deaths.....																		
	Discharges.....											48	1	26		107			

APPENDIX C.—Wherein are given for the year 1885 all military stations, their mean strength of command, &c.—Continued.

Station.	Remaining at end of last year.			Number of admissions.			Aggregate.	Admission rate per 1,000 of mean strength.	No. troops per 1,000 of mean strength constantly non-effective from sickness.	Discharged for disability.	Discharged by order.	Annual rate per 1,000 of mean strength discharged for disability.	Number of deaths.	Annual death rate to 1,000 of mean strength.	Averageduration of treatment among patients recovered.	Averageduration of treatment among patients discharged for disability.	Averageduration of treatment among patients died.	Rate per 1,000 of recoveries to whole number admitted.	Rate per 1,000 of discharges for disability to whole number admitted.	Rate per 1,000 of deaths to whole number admitted.	
	Diseases.	Injuries.	Total.	To quarters.	To hospital.	Total.															
<i>Military departments—Continued.</i>																					
Department of California.....	1,059	35	14	49	545	464	1,009	1,058	953	33	32	2	30	11	10	10	100	53	.....	.....	.....
Cases.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Deaths.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Discharges.....	1,728	52	21	73	772	668	1,340	1,413	775	28	32	2	30	11	6	11	107	16	.....	.....	.....
Department of the Columbia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<i>The Army.</i>																					
Total strength, admissions, &c.....	24,390	872	305	1,177	19,383	13,670	33,053	34,230	1,355	41	757	35	31	188	8	9	80	30	972	.....	.....
Total deaths.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total discharges.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

APPENDIX C.—Wherein is given for the year 1885 all military stations, their mean strength of command, &c.—Continued.

Station.	Enteric fever.	Specific, contagious, and infectious diseases.	Malarial fevers and resulting conditions.	Typho-malarial fever.	Diarrhoea.	Dysentery.	Other miasmatic diseases.	Gonorrhoea and results.	Syphilis and results.	Other venereal diseases.	Vaccina.	Other enthetic diseases.	Alcoholism.	Other dietic diseases.	Rheumatism.	Other constitutional diseases.	Developmental diseases.	Parasitic diseases.	Headache and neuralgia.	Other diseases of the nervous system.
<i>North Atlantic region.</i>																				
Fort Preble, Me.			4		5			1					2		3					1
Kennebec Arsenal, Me.								1							3				2	
Fort Warren, Mass.	1				19				2	2			5		23		1		16	2
Watertown Arsenal, Mass.					11								4		10				1	1
Springfield Armory, Mass.			17		10					7					1				4	
Fort Adams, R. I.			2		43	1		8	3	3	1		27	1	30	5	1		16	2
Fort Trumbull, Conn.	1		1		4	1			10		3		3		2				3	
West Point, N. Y.	1	1	39		45	2		1					3		15				14	
David's Island, N. Y.	1	20	32		103	2		51	19	5	92	2	3		25	2		2	28	7
Fort Schuyler, N. Y.			1		7				1	1			9		10	1		2	3	1
Willels Point, N. Y.			2		67			29	13	1	2		62		66	1		1	26	2
Fort Columbus, N. Y.			1		16			3	2	2		1	6		14	1			10	5
Fort Hamilton, N. Y.			3		19			10	13	1	1		10		50			8	14	
Fort Wadsworth, N. Y.					7			1	3				4		1				1	
New York City, N. Y.					1														2	1
Frankford Arsenal, Pa.					7								1		5					
Fort McHenry, Md.			17		9			10	3	3	1		14		11				5	1
Washington Barracks, D. C.	2	13	39		59			8	8	3	1	1	22		25				13	3
Fort Myer, Va.	1		37	2	39								2		19				15	3
Fort Monroe, Va.	4	22	44		42	2		14	8	10			19		32				23	
Temporary camps.			1										1							
Total strength, admissions, &c.	11	62	342	2	628	16		137	85	31	111	4	197	1	345	10	2	8	196	33
Total deaths.	2	2											1		1					2
Total discharges.	1				1				11	1			1		8					9
Ratios to 1,000 of mean strength	3.7	20.8	114.9	0.7	211.0	5.4		46.0	28.6	10.4	37.3	1.3	66.2	0.3	115.9	3.4	0.7	2.7	65.8	11.1
<i>South Atlantic region.</i>																				
Saint Augustine, Fla.	1	2	13	1	16			1			10		13		11				10	

APPENDIX C.—Wherein are given for the year 1885 all military stations, their mean strength of command, &c.—Continued.

Station.	Enteric fever.	Specific, contagious, and infectious diseases.	Malarial fevers and resulting conditions.	Typho-malarial fever.	Diarrhea.	Dysentery.	Other miasmatic diseases.	Gonorrhea and results.	Syphilis and results.	Other venereal diseases.	Vaccina.	Other enthetic diseases.	Alcoholism.	Other dietic diseases.	Rheumatism.	Other constitutional diseases.	Developmental diseases.	Parasitic diseases.	Headache and neuralgia.	Other diseases of the nervous system.
<i>South Atlantic region.—Continued.</i>																				
Total strength, admissions, &c.	1	2	13	1	16			1			10		13		11				10	
Total deaths	1																			
Total discharges					1															1
Ratios to 1,000 of mean strength	10.5	21.1	136.8	10.5	168.4			10.5			105.3		136.8		115.8				105.3	
<i>Gulf region.</i>																				
Fort Brown, Tex.	1	9	41		39	2		14	25	9	9	1	18		24			3	2	1
Mount Vernon Barracks, Ala.			23		21			1					9		5				6	2
Jackson Barracks, La.			9		14			11	4	2	4		7		4				4	2
New Orleans, La.			2																	
Fort Barrancas, Fla., and Camp Mitchell, Ga.			22		14	1		7	7	1	4		6		17	1			9	1
Total strength, admissions, &c.	1	9	97		88	3		33	36	12	17	1	40		50	1		3	21	7
Total deaths						1														
Total discharges								2	7											2
Ratios to 1,000 of mean strength	2.6	23.6	253.9		230.4	7.9		86.4	94.2	81.4	44.5	2.6	104.7		130.9	2.6		7.9	55.0	18.3
<i>North Pacific coast region.</i>																				
Fort Townsend, Wash.			3		13			3	4				5		4				8	
Fort Canby, Wash.						1		1	1	2					1				4	
Vancouver Barracks, Wash.	2	2	56		22			8	2	1	1		20		19	1		1	29	8
Fort Gaston, Cal.																			2	
Bonifia Barracks and Arsenal, Cal.			7		5								8		14				2	1
Angel Island, Cal.		1	1		5	8		2	2	1			5		2				2	
Alcatraz Island, Cal.					9	2		3		2			8		3				5	2
Presidio of San Francisco, Cal.		1	5		22	4		11	7	3			15		17				10	4
Fort Mason, Cal.		1	2		1					1			1		3					2
Fort Winfield Scott, Cal.					8			5					6		5				7	

Total strength, admissions, &c.	2	5	74	85	10	32	16	9	3	68	69	1	1	69	12
Total deaths												1			1
Total discharges							2			2	1	2			2
Ratios to 1,000 of mean strength	1.3	3.2	47.4	54.5	6.4	20.5	10.3	5.8	1.9	43.6	43.6	0.6	0.6	44.2	7.7
<i>North Pacific river region.</i>															
Fort Walla Walla, Wash.	8		33	2		1	1	1		6	11		1		
Total strength, admissions, &c.	8		33	2		1	1	1		6	11		1		
Total deaths															
Total discharges										1					
Ratios to 1,000 of mean strength	27.8		114.6	6.9		3.5	3.5	3.5		20.8	38.2		3.5		
<i>South Pacific coast region.</i>															
San Diego Barracks, Cal.			3	5	2	3	7	1		1		1		1	2
Total strength, admissions, &c.			3	5	2	3	7	1		1		1		1	2
Total deaths					1										
Total discharges															
Ratios to 1,000 of mean strength			66.7	111.1	44.4	66.7	155.6	22.2		22.2		22.2		22.2	44.4
<i>Lake region.</i>															
Fort Brady, Mich.		1	1	15		3	4	3	1	17	4			1	2
Fort Mackinac, Mich.						5	4	1		5	2			3	
Fort Wayne, Mich.	2	1	20	15	1	10	14	5		11	11			7	
Fort Niagara, N. Y.			2	3		2	2		3	3	2			2	
Fort Porter, N. Y.	1	2	2	6		5	12	2	1	7	4			5	
Fort Ontario, N. Y.			1	2		1	1	3	1	6	4			1	
Madison Barracks, N. Y.	1		1	27		21	12	2	18	38	16	2		28	2
Plattsburg Barracks, N. Y.			1	2		2	3			2				1	
Headquarters Department of Missouri, Chicago, Ill.	1			1			1								
Total strength, admissions, &c.	5	4	28	71	1	47	53	16	25	89	43	4		49	4
Total deaths															
Total discharges							2				2	1			
Ratios to 1,000 of mean strength	5.8	4.6	32.3	82.0	1.2	54.3	61.2	18.5	28.9	102.8	49.7	4.6		56.6	4.6
<i>River region north.</i>															
Poplar River Camp, Mont.		2	2	13	1	1	2		1	13	20			25	
Fort Buford, Dak.			3	16		4	5			19	26			18	5
Fort Custer, Mont.			7	45	3	25	27	7		8	70	2		68	7
Fort Keogh, Mont.		2	5	23	1	3	4	4	11	28	34	2		32	5
Fort Abraham Lincoln, Dak.			1	26		6	6	1	12	29	21	1		15	6

APPENDIX C.—Wherein are given for the year 1885 all military stations, their mean strength of command, &c.—Continued.

Stations.	Enteric fever.	Specific contagious and infectious diseases.	Malarial fevers and resulting conditions.	Typho-malarial fever.	Diarrhea.	Dysentery.	Other miasmatic diseases.	Gonorrhea and results.	Syphilis and results.	Other venereal diseases.	Vaccina.	Other enthetic diseases.	Alcoholism.	Other dietetic diseases.	Rheumatism.	Other constitutional diseases.	Developmental diseases.	Parasitic diseases.	Headache and neuralgia.	Other diseases of the nervous system.
<i>River region north—Continued.</i>																				
Fort Yates, Dak.....			11		13	3		5	4	4	3		14		18	1			11	2
Fort Bennett, Dak.....					6						2		2		1				5	
Fort Sully, Dak.....			8		10			9	1		1		1		13	4		1	7	4
Fort Randall, Dak.....			7		22	2		2	4			1	3		24	2			19	1
Fort Pembina, Dak.....			4		3			10	2	2	4		1		4				8	
Fort Totten, Dak.....		2	1		20	1		5	1			2	4		16	2			12	2
Fort Sisseton, Dak.....		1			9				2			1			16				10	
Fort Snelling, Minn.....	1	1	5		44	2		8	11	3			1		16	3		6	11	3
Headquarters Department of Dakota, Fort Snelling, Minn.....																				
Fort Omaha, Nebr.....	4	2	23		42			17	19	9	6	2	41	1	23	1		1	15	4
Headquarters Department of the Platte, Omaha, Nebr.....					3								1		2				1	
Fort Leavenworth (post) Kan.....		2	123		90	6		12	48	7	1		21		60	2		5	66	6
Fort Leavenworth (prison guard), Kan.....					5	1		1	4	1			2		2				9	1
Leavenworth, Kan.....					1	2									2				1	3
Fort Riley, Kan.....	9		36		53	6		4	15				4		12	1			26	3
Fort Hays, Kan.....		1	15		5	2		2	2				1		8				1	1
Fort Lyon, Colo.....			39		15	1		1	2	2	3		8		9				4	1
Rock Island Arsenal, Ill.....			9		17			3		1					24	1			10	
Jefferson Barracks, Mo.....	6	10	351	2	361	12		14	34	3	41		5		40	8	2	1	111	10
Indianapolis Arsenal, Ind.....			12	1	23	4			1	3					4				5	
Newport Barracks, Ky.....					2			1	3	2			8		1				8	
Columbus Barracks, Ohio.....	3	20	108		86			93	38	13	30		6		43	2	1	7	11	4
Allegheny Arsenal, Pa.....					1								1						1	
Watervliet Arsenal, N. Y.....		2	4		18										7				6	
Temporary camps.....		1	35		39	5		2	1	1	1	1	3		8				3	
Total strength, admissions, &c.....	23	51	519	5	1,016	52		228	230	64	121	8	210	2	524	33	3	21	514	68
Total deaths.....	8		2										2		1	1			4	
Total discharges.....			2		1	1		1	23	8			2		18	6	1		1	23
Ratios to 1,000 of mean strength.....	4.0	8.9	142.8	0.9	177.2	9.1		39.8	41.2	11.2	21.1	1.4	38.2	0.3	91.4	5.8	0.5	3.07	89.6	11.9

<i>River region south.</i>																
Fort Elliott, Tex.	1	10	4	9	1	8	6	2	1	1	22	2	2	2	2	2
Fort Supply, Ind. T.		39	44	11	9	3	3				23	2	1	4	27	1
Fort Reno, Ind. T.	1	4	106	88	11	9	1	1			23	2	1	4	23	1
Fort Sill, Ind. T.		146	1	77	4	8	6	3	4	1	17	1			15	5
Fort Gibson, Ind. T.	2	112	6	2	2	1	3	1	1		12	8			15	1
San Antonio, Tex.	9	45	21	3	19	8	3	6	1	29	14			8	15	2
Fort McIntosh, Tex.	37	21	25	2	17	6		5		6	13				8	2
Fort Ringgold, Tex.		45	54	6	35	22	5	5	5	14	19	1		7	30	1
Little Rock Barracks, Ark.		37	6	3	7	9	1			2		1				
Augusta Arsenal, Ga.	1	1	1	1					1		1				5	
Temporary camps		33	12	2	3			1	1		9				12	1
Total strength, admissions, &c.	1	53	595	1	338	41	103	66	13	24	11	64		127	5	15
Total deaths			1	1	2	2										
Total discharges			2	1	6	6		1						2	3	6
Ratios to 1,000 of mean strength	0.5	28.4	318.7	0.5	181.0	22.0	55.2	35.4	7.0	12.9	5.9	34.3		68.0	2.7	81.4
<i>North plateau and mountain region.</i>																
Fort Colville, Wash.			43	1	10	4		7			47		17	2	17	
Fort Missoula, Mont.	3	1														
Fort Shaw, Mont.	1	9	22		10	3		2		10	39	1	4		14	12
Fort Assiniboine, Mont.	28	46	73		35	61	4	11	1	13	19	2	3		47	6
Fort Ellis, Mont.		9	7		3	6		1		6	23				5	2
Fort Laramie, Wyo.	3	6	11		3	1	6			14	15				11	3
Fort Robinson, Nebr.		15	16		1	2				2	19				20	1
Fort Niobrara, Nebr.	5	5	22	1	4	12	6	3		2	34	1		14	3	
Fort D. A. Russell, Wyo.	2	20	33		19	11	6	4		14	1			1	18	2
Fort Siney, Nebr.	1	5	65		8	5	1			45	19			1	40	
Fort Bridger, Wyo.		14	5		1	10				8	19	1			10	2
Fort Douglas, Utah	12	2	75		20	28	1			31	31		2		32	4
Fort McFermitt, Nev.	1	1	11		1		2			11	1				11	
Fort Fred Steele, Wyo.	1	13	6							8	4				26	
Fort Spokane, Wash.		1	7		6	1	5			4	1	14	1		2	1
Fort Klamath, Oreg.		10	1	8	1	2				2	6	2			4	
Fort Coeur d'Alene, Idaho		1	27	3	6	2			1	1	18				10	3
Fort Maginnis, Mont.		18	35		2	1				10	1	24	2		12	6
Fort McKinney, Wyo.	1	20	64		5	10				21	70			1	36	2
Fort Meade, Dak.	3	16	35		9	4	6			43	37	2			21	9
Fort Washakie, Wyo.	2		11	1	10					2	7				19	
Cantonment Uncompahgre, Colo.		1	8	1	1	3		4	1	1	4				6	1
Fort Lewis, Colo.		42	13	1	12	6	1	12		21	25		1		36	8
Fort Halleck, Nev.		3	5			1				4	3				3	1
Boisé Barracks, Idaho	1	6	7		3	5		2	1	7	5				4	
Fort Bidwell, Cal.	1	4	10							16	18				3	
Temporary camps	1	6	24		1					13	6				3	
Total strength, admissions, &c.	16	51	273	2	643	8	170	179	30	54	4	356	4	564	14	424
Total deaths	1															1
Total discharges	1		2		2		1	25	1			5		16	3	17
Ratios to 1,000 of mean strength	2.9	9.4	50.2	0.4	118.2	1.5	31.2	32.9	5.5	9.9	0.7	65.4	0.7	103.7	2.6	77.9

Station.	Enteric fever.	Specific, contagious, and infectious diseases.	Malarial fevers and resulting conditions.	Typho-malarial fever.	Diarrhea.	Dysentery.	Other miasmatic diseases.	Gonorrhea and results.	Syphilis and results.	Other venereal diseases.	Vaccina.	Other enthetic diseases.	Alcoholism.	Other dietic diseases.	Rheumatism.	Other constitutional diseases.	Developmental diseases.	Parasttic diseases.	Headache and neuralgia.	Other diseases of the nervous system.
<i>South plateau and mountain region.</i>																				
Fort Mojave, Ariz.					2			6	7				3		4				5	1
Whipple Barnoks, Ariz.			10		59	1		14	1	4	4	1	7		13	1	1		7	
Fort McDowell, Ariz.			6		12			1	1	1			1		8				6	
Fort Lowell, Ariz.	2		16		15	2		6	5				16		8				12	4
Fort Grant, Ariz.			44		38	7		9	3	1	1	1	11		14	1			25	4
Fort Bliss, Tex.		4	14		25			2	4			2	15		19				12	3
Camp Rice, Tex.			6		16	1		2	2		2		1		8				1	1
Fort Davis, Tex.		9	57		53	49		15	12	5	2	9	6		31	2		2	21	4
Fort Stockton, Tex.			14		18	2		4	3			1	4		4			2	7	1
Pena Colorado, Tex.			4		4	2		1	2		1		1		3					
Fort Concho, Tex.		2	34	4	30	1		15	19		1	1	13		15		2		17	1
Camp Del Rio, Tex.			3		8						2		3		5				6	
Fort Clark, Tex.	2	2	157		152	1		23	8	5	3	5	39	1	60			4	24	14
Camp at Langtry, Tex.			5		1	1		1					1		3				1	
Fort Union, N. Mex.		2	5		18	1							10		9	2			6	1
Fort Murey, N. Mex.			2		6				3	5			10		6				2	
Fort Wingate, N. Mex.			23		60	4		22	8	4	5		16		44	4		1	32	2
Fort Verde, Ariz.			4		47	3			3	1		1	6		23			1	15	3
Fort Apache, Ariz.			13		10	3		1	3	2	2		3		11				6	1
San Carlos, Ariz.			1		2			2	1		1		1		2				1	1
Fort Thomas, Ariz.			23		40	1		3	10	1			6		9	1			3	
Fort Bowie, Ariz.			4		16		1		1	2	2		7		7				4	
Fort Huachuca, Ariz.	1	2	22	3	17			3	9	3		1	3		9			1	9	6
Fort Bayard, N. Mex.	1		68		12			2	6			3	29		16		1		4	5
Fort Selden, N. Mex.			1		11			2	5			2	5		5				1	
Fort Stanton, N. Mex.		1	8		20	1	1	3	3			1	9		4	2			1	1
South Fork, N. Mex.			1												1					
Temporary camps	1		16		21	26			1				2		10	1			9	
Total strength, admissions, &c.	7	22	571	7	743	106	2	138	118	38	24	28	228	1	346	14	2	14	242	53
Total deaths.	2	1	1	1		2	1					1	1		1	1				

Total discharges.....	1.7	5.4	140.6	1.7	183.0	1	26.1	0.5	34.6	13	29.1	1	9.4	5.9	6.9	1	53.2	0.2	15	85.2	3	3.4	5	0.5	3.4	1	59.6	16	13.1
Ratios to 1,000 of mean strength.....	1	5.4	140.6	1.7	183.0	1	26.1	0.5	34.6	13	29.1	1	9.4	5.9	6.9	1	53.2	0.2	15	85.2	3	3.4	5	0.5	3.4	1	59.6	16	13.1
In the field and en route.....	1	5.4	83	1.7	83	19	22	2	4	22	2	4	5	5	11	29	29	15	3	15	3	15	3	15	3	15	3	15	3
Total strength, admissions, &c.....	1	5.4	83	1.7	83	19	22	2	4	22	2	4	5	5	11	29	29	15	3	15	3	15	3	15	3	15	3	15	3
Total deaths.....	1	5.4	83	1.7	83	19	22	2	4	22	2	4	5	5	11	29	29	15	3	15	3	15	3	15	3	15	3	15	3
Total discharges.....	1	5.4	83	1.7	83	19	22	2	4	22	2	4	5	5	11	29	29	15	3	15	3	15	3	15	3	15	3	15	3
Ratios to 1,000 of mean strength.....	0.9	77.3	77.3	17.7	20.5	1.9	3.7	4.7	10.2	27.0	14.0	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Deaths at large.....	1	5.4	83	1.7	83	19	22	2	4	22	2	4	5	5	11	29	29	15	3	15	3	15	3	15	3	15	3	15	3
Discharges at large.....	1	5.4	83	1.7	83	19	22	2	4	22	2	4	5	5	11	29	29	15	3	15	3	15	3	15	3	15	3	15	3
<i>Military departments.</i>																													
Department of the East.....	19	90	601	4	900	26	305	199	66	190	5	333	1	481	18	3	17	305	47	3	3	3	3	3	3	3	3	3	3
Department of Texas.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Department of Missouri.....	19	29	1,288	3	1,057	89	113	167	30	80	14	175	1	393	24	3	13	434	57	4	4	4	4	4	4	4	4	4	4
Department of Dakota.....	1	48	154	3	471	14	150	148	35	64	6	252	3	506	27	1	14	359	70	1	1	1	1	1	1	1	1	1	1
Department of the Platte.....	20	14	135	3	392	5	90	98	23	19	3	210	2	279	3	2	6	248	23	2	2	2	2	2	2	2	2	2	2
Department of Arizona.....	1	2	175	3	276	37	55	44	18	8	8	67	4	114	1	1	2	108	20	13	13	13	13	13	13	13	13	13	13
Department of California.....	1	5	26	3	81	11	24	18	8	2	2	75	1	66	1	4	46	12	1	1	1	1	1	1	1	1	1	1	1
Department of the Columbia.....	10	3	111	1	86	4	23	18	8	5	2	45	1	80	4	2	2	61	7	3	3	3	3	3	3	3	3	3	3
<i>The Army.</i>																													
Total strength, admissions, &c.....	76	259	2,931	18	3,718	258	2	915	799	219	389	61	1,292	8	2,118	83	8	82	1,693	263	9	9	9	9	9	9	9	9	9
Total deaths.....	9	3	4	3	7	1	8	89	7	15.9	2.5	53.0	0.3	86.8	3.4	0.3	3.4	69.4	10.8	9	9	9	9	9	9	9	9	9	9
Total discharges.....	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Ratios to 1,000 of mean strength.....	3.1	10.6	120.2	0.7	152.4	10.6	0.1	37.5	32.8	9.0	15.9	2.5	53.0	0.3	86.8	3.4	0.3	3.4	69.4	10.8	9	9	9	9	9	9	9	9	9

APPENDIX C.—Wherein are given for the year 1885 all military stations, their mean strength of command, &c.—Continued.

Station.	Diseases of the eye.	Diseases of the ear.	Catarrhs and common colds.	Bronchitis.	Pneumonia.	Pulmonary phthisis.	Pleuritis.	Other diseases of the respiratory system.	Diseases of the heart and valves.	Other diseases of the circulatory system.	Tonsillitis.	Dyspepsia, colic, and constipation.	Other diseases of the digestive system.	Diseases of the kidneys.	Other diseases of the genito-urinary system (not venereal).	Diseases of the locomotor system.	Diseases of the integumentary system.	All other diseases.
<i>North Atlantic region.</i>																		
Fort Preble, Me.....	.....	.....	7	2	.....	1	.....	1	.....	.....	3	2	2	.....	1	.....	1	.....
Kennebec Arsenal, Me.....	.....	.....	12	.....	.....	.....	1	.....	1	.....	.....	3	.....	.....	.....	.....	.....	.....
Fort Warren, Mass.....	.....	.....	16	2	.....	.....	.....	.....	.....	.....	6	11	2	.....	2	.....	8	.....
Watertown Arsenal, Mass.....	.....	1	13	1	.....	.....	.....	.....	.....	.....	1	1	3	2	.....	.....	.....	.....
Springfield Armory, Mass.....	.....	.....	3	3	.....	.....	.....	.....	.....	.....	.....	3	3	.....	.....	.....	2	.....
Fort Adams, R. I.....	8	5	26	6	2	1	1	5	.....	.....	7	16	5	.....	1	.....	13	8
Fort Trumbull, Conn.....	.....	.....	4	4	.....	1	.....	.....	.....	.....	3	1	2	.....	.....	.....	2	.....
West Point, N. Y.....	20	3	17	59	3	2	.....	2	1	.....	25	27	9	.....	7	1	26	.....
David's Island, N. Y.....	5	5	73	3	7	2	1	1	3	.....	37	45	29	1	17	4	79	17
Fort Schuyler, N. Y.....	1	1	1	4	.....	.....	.....	.....	3	.....	2	.....	6	1	1	5	3	1
Willetts Point, N. Y.....	12	7	27	22	3	1	.....	1	3	.....	17	63	77	1	10	3	60	137
Fort Columbus, N. Y.....	.....	2	10	4	.....	.....	.....	.....	1	.....	1	11	7	.....	.....	.....	5	1
Fort Hamilton, N. Y.....	3	3	51	1	3	.....	.....	1	2	.....	8	14	6	3	4	.....	14	2
Fort Wadsworth, N. Y.....	2	.....	2	4	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	1	.....	5	1
New York City, N. Y.....	.....	.....	6	2	1	.....	.....	.....	1	.....	1	6	4	.....	1	.....	.....	.....
Frankford Arsenal, Pa.....	.....	.....	14	1	1	1	.....	.....	1	.....	5	3	2	1	.....	2	1	8
Fort McHenry, Md.....	.....	1	106	2	.....	.....	2	9	.....	.....	1	12	16	.....	1	.....	22	2
Washington Barracks, D. C.....	5	.....	.....	.....	.....	.....	.....	.....	1	.....	9	14	3	1	.....	.....	5	6
Fort Myer, Va.....	1	.....	1	45	.....	1	.....	1	1	.....	9	14	3	.....	.....	.....	5	6
Fort Monroe, Va.....	8	6	61	2	1	1	1	9	3	.....	1	24	43	.....	3	2	26	2
Total strength, admissions, &c.....	65	34	451	171	21	11	6	30	21	.....	132	257	224	10	49	17	280	180
Total deaths.....	1	.....	.....	1	2	8	.....	.....	2	.....	.....	.....	1	3	.....	.....	.....	.....
Total discharges.....	1	4	.....	.....	10	1	2	8	.....	.....	.....	1	3	1	9	6	1	2
Ratios to 1,000 of mean strength.....	21.8	11.4	151.5	57.4	7.1	8.7	2.0	10.1	7.1	.....	44.3	86.3	75.2	3.4	18.5	5.7	94.1	60.5
<i>South Atlantic region.</i>																		
St. Augustine, Fla.....	4	.....	9	1	.....	.....	1	.....	.....	.....	1	7	4	.....	1	1	17	1

Total strength, admissions, &c.....	4	9	1	1	1	1	1	7	4	1	1	17	1
Total deaths.....				1									
Total discharges.....													
Ratios to 1,000 of mean strength.....	42.1	94.7	10.5		10.5			10.5	73.7	42.1	10.5	10.5	178.9

Gulf region.

Fort Brown, Tex.....	2	5	2	1	1	4	2	11	6	2	6	15	2
Mount Vernon Barracks, Ala.....	3	1	14			1	1	5	3	1	4	9	2
Jackson Barracks, La.....	1	1	1	7		8		6	6	2	3	2	
New Orleans, La.....										1			
Fort Barrancas, Fla., and Camp Mitchell, Ga.....	2	2	8	3	1	2	2	1	11	16	2	4	1
Total strength, admissions, &c.....	8	4	23	16	2	1	10	7	4	33	31	8	2
Total deaths.....					1					1			
Total discharges.....	2	1			2	1	3			1			
Ratios to 1,000 of mean strength.....	20.9	10.5	73.3	41.9	5.2	2.6	26.2	18.3	10.5	86.4	81.2	20.9	5.2

North Pacific coast region.

Fort Townsend, Wash.....		1	21	11			1		1	3	1	1	4
Fort Cully, Wash.....			1			1				2		1	
Vancouver Barracks, Wash.....	2	3	15	8	2	1	2	1	21	17	1	8	36
Fort Gaston, Cal.....								2	1	1			2
Benicia Barracks and Arsenal, Cal.....	4	1	10	3	1			5	8	5			5
Angel Island, Cal.....	1			2		1	1	5	6	1	1	1	5
Alcatraz Island, Cal.....	1		8	2	1	1	1	1	4	2	3		5
Presidio of San Francisco, Cal.....	2		26	6	1	2	2	1	8	9	11	3	19
Fort Mason, Cal.....	1		4					1		5		1	1
Fort Winfield Scott, Cal.....	5	1	1	13				7	8	10	1		9
Total strength, admissions, &c.....	18	6	86	50	6	4	3	6	4	29	58	57	3
Total deaths.....					1					3	1		
Total discharges.....	6	1			1	3	1	6	1	3	1	2	1
Ratios to 1,000 of mean strength.....	11.5	3.8	55.1	32.1	3.8	2.6	1.9	3.8	2.6	18.6	37.2	36.5	1.9

North Pacific river region.

Fort Walla Walla, Wash.....			9	7	1	1	1	9	5	4		2	14
Total strength, admissions, &c.....			9	7	1	1	1	9	5	4		2	14
Total deaths.....				2	1								
Total discharges.....										1			
Ratios to 1,000 of mean strength.....			31.2	24.3	3.5		3.5	31.2	17.4	13.9		6.9	48.6

APPENDIX C.—Wherein are given for the year 1885 all military stations, their mean strength of command, &c.—Continued.

Station	Diseases of the eye.	Diseases of the ear.	Catarrahs and common colds.	Bronchitis.	Pneumonia.	Pulmonary phthisis.	Pleuritis.	Other diseases of the respiratory system.	Diseases of the heart and valves.	Other diseases of the circulatory system.	Tonsillitis.	Dyspepsia, colic, and constipation.	Other diseases of the digestive system.	Diseases of the kidneys.	Other diseases of the genito-urinary system (not venereal).	Diseases of the locomotor system.	Diseases of the integumentary system.	All other diseases.
<i>South Pacific coast region.</i>																		
San Diego Barracks, Cal.	1		1	2		2		1	1			1	1		1		3	1
Total strength, admissions, &c.	1		1	2		2		1	1			1	1		1		3	1
Total deaths						1		1					1					1
Total discharges						3												
Ratios to 1,000 of mean strength	22.2		22.2	44.4		44.4		22.2	22.2			22.2	22.2		22.2		66.7	22.2
<i>Lake region.</i>																		
Fort Brady, Mich.	1		2	2					2			2	19				3	2
Fort Mackinac, Mich.		2	3	9							4		3		1		3	
Fort Wayne, Mich.	1		1	15	2	1			2		5	4	9	1	1		15	6
Fort Niagara, N. Y.			8	7							3		3	1	1		3	
Fort Porter, N. Y.	3	1	3	5			1		3		1		5			1	7	
Fort Ontario, N. Y.	3		3	1					3		2	4	1		1		1	
Madison Barracks, N. Y.	1	2	31	11							16	13	13	2	1		13	4
Plattsburg Barracks, N. Y.	1							1				3		1				
Headquarters Department of the Missouri, Chicago, Ill.																		1
Total strength, admissions, &c.	10	5	51	50	2	1	1	1	10		31	26	53	5	4	1	45	18
Total deaths								1	1					1				
Total discharges	4	1		1		1		2	2			1						
Ratios to 1,000 of mean strength	11.6	5.8	58.9	57.7	2.9	1.2	1.2	1.2	11.5		35.8	30.0	61.2	5.8	4.0	1.2	52.0	15.0
<i>River region north.</i>																		
Poplar River Camp, Mont.	1		8	22			1		2		3	10	15		3			8
Fort Buford, Dak.	1	4	19	18	2		2	2			6	15	9		3	1	9	5
Fort Custer, Mont.	0		26	58				2	4		10	52	43		9	7	43	23

Fort Keogh, Mont.	4	3	29	8				1	3	2	17	10	46	1	3	10	20	8
Fort Abraham Lincoln, Dak.	6	2	45	5							2	22	25		3	2	19	3
Fort Yates, Dak.	2	3		16	2			6	1		7	14	6	1	3	3	11	5
Fort Bennett, Dak.	1		8		3						2	3	1				4	
Fort Sully, Dak.	6		8	10	1			1		3	7	29	10		5	2	22	2
Fort Randall, Dak.	4	1	30	8	3		1	3			7	2	6		3		5	4
Fort Pembina, Dak.	2	1	4	14		1		1			2	12	6			1	15	1
Fort Totten, Dak.	3	2	5	33					3		35	7	13	1	4	1	31	8
Fort Sisseton, Dak.			24	8		1		1			11	18	28				5	
Fort Snelling, Minn.	9	2	8	9	1	2		2			9	13	24		2	2	12	3
Headquarters Department of Dakota, Fort Snelling, Minn.																		
Fort Omaha, Nebr.	3	5	36	4	1	2	1	8	3		13	31	22	2	8		39	4
Headquarters Department of the Platte, Omaha, Nebr.			2	1	1							1	1					1
Fort Leavenworth (post), Kans.	7	11	70	44	1	2	1	2			29	41	40		7		39	3
Fort Leavenworth (prison guard), Kans.	1		10	2					2		3	7	1	1	2	1	1	2
Leavenworth, Kans.								1									2	
Fort Riley, Kans.	5	3	20	8				1	3		11	13	6		2		17	2
Fort Hays, Kans.		1	5	8				1			13	2	3		2		3	
Fort Lyon, Colo.	1	2	9	13					7	2	2	9	11		3		14	4
Rock Island Arsenal, Ill.	1		10	12			1	4	1			10			2	2	2	
Jefferson Barracks, Mo.	12	9	135	59	1	1	4	6	5		102	108	10	1	5	2	92	5
Indianapolis Arsenal, Ind.	1						1				1	2	6				2	2
Newport Barracks, Ky.				2			1					1			1		2	4
Columbus Barracks, Ohio.	18	5	4	84	1			1			29	11	66	1	14	2	31	19
Allegheny Arsenal, Pa.	1	2	2	3				4				2			1		1	
Watervliet Arsenal, N. Y.	1	2	2	6	1						8	3			2	1		
Temporary camps	5	2	9	1					1		1	9	5	1	3	1	21	1
Total strength, admissions, &c.	102	67	523	456	18	8	14	46	35	7	322	462	406	9	90	38	462	137
Total deaths					3	2		1	1				4	1				1
Total discharges	8	3		3	6			2	12	1			8	1	14	8	5	3
Ratios to 1,000 of mean strength	17.8	11.7	91.2	79.5	3.1	1.4	2.4	8.0	6.1	1.2	56.1	80.6	70.8	1.6	15.7	6.6	80.6	23.9
<i>River region south.</i>																		
Fort Elliott, Tex.			2	2		3			3		2	11	4			2	5	6
Fort Supply, Ind. T.	9	3	48	10		1			2	1	9	25	19		3	3	21	13
Fort Reno, Ind. T.	7	4	17	18	1		1		3		6	34	14		4	1	44	3
Fort Sill, Ind. T.	1		8	24				33			3	4	13	1	2	4	3	1
Fort Gibson, Ind. T.		3	20	1					2		4	4	1				17	1
San Antonio, Tex.	5	2		23	1	4		3	2		5	16	5	1	3	1	26	2
Fort McIntosh, Tex.				4							1	4					3	1
Fort Ringgold, Tex.	10	4	16	3	1				1		7	7					39	5
Little Rock Barracks, Ark.	1						1		8	1	1	2	5	1	6		4	1
Augusta Arsenal, Ga.			3	1									4		1		4	

Fort Lewis, Colo.	11	16	21	2	3			8			38	34	54		5	9	34	1
Fort Halleck, Nev.			2								1	1					2	
Boisé Barracks, Idaho	1	2	4		1			3			2	10	6	2		1	5	
Fort Bidwell, Cal.	3	1	9		1	1					3	6	3				4	2
Temporary camps	1			14			1				5	5	8				5	
Total strength, admissions, &c	128	51	460	394	15	12	7	53	20	5	344	366	381	6	58	42	355	115
Total deaths				2	3	1			1				1	3				
Total discharges	11	3		1	1	10	1	3	9	1			7	3	4	15	3	8
Ratios to 1,000 of mean strength	23.5	9.4	84.5	72.4	2.8	2.2	1.3	9.7	3.7	0.9	63.2	67.3	70.0	1.1	10.7	7.7	65.2	21.1
<i>South plateau and mountain region.</i>																		
Fort Mojave, Ariz.	3		2		1				1		1	1	3				4	2
Whipple Barracks, Ariz.	1		4	22					1			12	15	1	4	1	6	1
Fort McDowell, Ariz.	1			2		1			4		1	1	12				5	1
Fort Lowell, Ariz.	3	2	2	17				1	1		6	10	11		3		11	4
Fort Grant, Ariz.	4	1	4	4		2					9	4	20		8		23	1
Fort Bliss, Tex.	7	4	14	4	1				1		5	12	16		3		16	
Camp Rice, Tex.		1	5		1		1		1			3	6				7	2
Fort Davis, Tex.	9	1	5	66	2	2	1	5	2		23	13	24	2	6	1	27	1
Fort Stockton, Tex.	6	1		7					1		6	4	3	1	1		10	4
Pena Colorado, Tex.	1		1								5	4			1	2		1
Fort Concho, Tex.	14	6	3	9	1	1		1	1		16	22	9		3	1	32	3
Camp Del Rio, Tex.	1		3								1	6					7	
Fort Clark, Tex.	24	8	42	10	3	3	3	3	8	1	2	43	22		6	8	71	2
Camp at Langtry, Tex.	1											1	1					
Fort Union, N. Mex.	2	1	4	2				1	1		13	12	6		4		9	3
Fort Marcy, N. Mex.			1	3	2	1		1			4	3	4				3	
Fort Wingate, N. Mex.	10	3	29	39		1			3		23	26	20		4	8	22	6
Fort Verde, Ariz.	2	2	2	14		1					1	8	11		1		3	1
Fort Apache, Ariz.		4	5	9				1			2	4	8		1	1	12	3
San Carlos, Ariz.	1											3					2	
Fort Thomas, Ariz.	5	1	8	2		2	1	4	2		4	5	10		1	2	12	3
Fort Bowie, Ariz.	2		2		1			2	1			7	4	2		1	5	6
Fort Huachuca, Ariz.	3	1	17	8	1	2			2		5	8	3		3		9	4
Fort Bayard, N. Mex.	7	1	1	3	1		1	1	3		9	15	10		2		17	3
Fort Selden, N. Mex.			1	4					4		1	7	6		4		1	4
Fort Stanton, N. Mex.	1	2	13	1	3	1		1	2		18	8	17		4	3	11	2
South Fork, N. Mex.					1													
Temporary camps	2	1	2	8			1		1		6	13	7		3	1	14	5
Total strength, admissions, &c	110	40	170	234	17	16	9	21	38	3	161	255	248	6	63	29	339	62
Total deaths		1			3	1			1	1			2	1				1
Total discharges	12	7			11				10	1			1		7	2	3	1
Ratios to 1,000 of mean strength	27.1	9.9	41.9	57.6	4.2	3.9	2.2	5.2	9.4	0.7	39.7	62.8	61.1	1.5	15.5	7.1	83.5	15.3

APPENDIX C.—Wherein are given for the year 1885 all military stations, their mean strength of command, &c.—Continued.

Station.	Diseases of the eye.	Diseases of the ear.	Catarrhs and common colds.	Bronchitis.	Pneumonia.	Pulmonary phthisis.	Pleuritis.	Other diseases of the respiratory system.	Diseases of the heart and valves.	Other diseases of the circulatory system.	Tonsillitis.	Dyspepsia, colic and constipation.	Other diseases of the digestive system.	Diseases of the kidneys.	Other diseases of the genito-urinary system (not venereal).	Diseases of the locomotor system.	Diseases of the integumentary system.	All other diseases.
In the field and en route	6	6	1	8	1	.....	2	2	2	2	10	18	20	1	5	3	44	10
Total strength, admissions, &c.	6	6	1	8	1	.....	2	2	2	2	10	18	20	1	5	3	44	10
Total deaths .....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total discharges .....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ratios to 1,000 of mean strength	5.6	5.6	0.9	7.4	0.9	.....	1.9	1.9	1.9	1.9	9.3	16.8	18.6	0.9	4.7	2.8	41.0	9.3
Deaths at large .....	.....	.....	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Discharges at large .....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<i>Military departments.</i>																		
Department of the East	Cases 106	50	543	332	25	13	11	46	34	.....	197	338	390	16	79	24	401	242
	Deaths .....	.....	.....	1	3	6	.....	.....	3	1	.....	.....	2	4	.....	.....	.....	.....
	Discharges	5	7	.....	.....	14	1	3	11	.....	.....	2	6	1	13	6	3	4
Department of Texas	Cases 73	25	81	124	9	11	6	13	25	4	68	137	85	5	35	13	247	23
	Deaths	1	.....	.....	4	1	.....	.....	1	.....	.....	.....	2	1	.....	.....	.....	.....
	Discharges	9	5	.....	.....	8	.....	.....	6	1	.....	.....	2	.....	3	2	2	.....
Department of the Missouri	Cases 94	67	460	277	15	19	9	71	44	4	311	422	297	5	65	30	434	72
	Deaths .....	.....	.....	.....	2	1	.....	.....	1	.....	.....	.....	5	1	.....	.....	.....	.....
	Discharges	5	5	.....	1	6	1	1	10	2	.....	.....	14	1	.....	9	5	.....
Department of Dakota	Cases 94	39	404	306	16	3	7	35	20	6	229	359	332	5	61	50	318	111
	Deaths .....	.....	.....	1	2	1	.....	1	2	.....	.....	.....	2	.....	.....	.....	.....	.....
	Discharges	9	2	.....	3	9	.....	2	14	.....	.....	1	6	1	5	10	3	.....
Department of the Platte	Cases 64	21	240	197	6	7	5	17	12	1	170	169	154	4	31	16	182	97
	Deaths .....	.....	.....	1	3	1	.....	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....
	Discharges	5	3	.....	1	8	1	1	4	1	.....	.....	3	1	8	7	3	.....
Department of Arizona	Cases 30	13	43	85	3	7	5	9	13	.....	39	74	103	4	26	6	103	34
	Deaths .....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	Discharges	4	1	.....	.....	3	.....	.....	5	.....	.....	1	2	.....	8	.....	2	.....
Department of California	Cases 21	3	64	36	5	8	.....	2	4	6	32	46	40	1	11	5	58	23
	Deaths .....	.....	.....	.....	1	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	Discharges	6	.....	.....	.....	5	.....	1	4	1	.....	.....	2	.....	1	1	.....	.....

Department of the Columbia.	Cases	9	11	64	66	12	6	1	16	7	2	36	58	55	4	15	11	106	14
	Deaths	3	1			2	1								1				
	Discharges	3	1			1	3		1	2				4	2	2	3		1
<i>The Army.</i>																			
Total strength, admissions, &c		491	229	1,904	1,483	90	65	44	209	159	23	1,082	1,603	1,511	44	323	155	1,854	576
Total deaths			1		3	17	13		2	6	2			11	12				2
Total discharges		46	24		8	2	50	3	9	50	5			38	6	39	34	13	9
Ratios to 1,000 of mean strength		20.1	9.4	78.1	60.8	3.7	2.7	1.8	8.6	6.5	0.9	44.4	65.7	62.0	1.8	13.2	6.4	76.0	23.6

APPENDIX C.—Wherein are given for the year 1885 all military stations, their mean strength of command, &c.—Continued.

Station.	Heat-stroke.	Frost-bite and general freezing.	Contusions and sprains.	Dislocations.	Fractures (not gun-shot).	Incised, lacerated, and punctured wounds.	Shot wounds.	All other injuries.	Admitted for—			Altitude of stations.	Number of wet days.	Number of dry days.	Number of days high wind.	Number of days calm.	Thermometric variations, daily mean for the year.	Number of great thermometric ranges during the year.	Mean temperature.	Temperature.	
									Diseases.	Injuries.	Total.									Highest.	Lowest.
North Atlantic region.																					
Fort Proble, Me.			3			1		5	36	9	45	Feet. 38	64	301	3.7	16.0	° F. 16	° F. 4	° F. 45.0	° F. 90	° F. - 5
Kennebec Arsenal, Me.								1	26	1	27										
Fort Warren, Mass.			24			2	1	9	119	36	155	38	68	297	12.3	4.3	15	5	47.2	92	- 2
Watertown Arsenal, Mass.			1						40	1	41	100	68	297	12.3	4.3	15	5	47.2	92	- 2
Springfield Armory, Mass.			5						61	7	68										
Fort Adams, R. I.			26		1		9	13	247	50	297	30									
Fort Trumbull, Conn.	1	1	5						47	8	55	25	58	307	4.7	25.3	16	1	47.7	92	1
West Point, N. Y.	5	3	87	2	1	7	1	23	723	99	822	167	70	295	2.7		21	6	48.1	100	-10
David's Island, N. Y.	1	1	13				2	5	65	21	86										
Fort Schuyler, N. Y.	1	2	126	4	7	16		25	915	181	1,096										
Willels Point, N. Y.			1		1	1	1	4	109	7	116		61	304	15.0	20.0	16	5	50.9	96	0
Fort Columbus, N. Y.			54			3		13	260	70	330										
Fort Hamilton, N. Y.			5			2		3	42	10	52										
Fort Wadsworth, N. Y.									13		13										
New York City, N. Y.			1			1		1	39	3	42	50	57	308	9.3	17.0	17	5	51.2	97	0
Frankford Arsenal, Pa.			13			9		8	116	30	146	36	68	297	1.3	7.3	15	5	52.6	97	1
Fort McHenry, Md.			55	1	3	8		11	376	81	457	90	72	293	1.0	32.0	18	8	52.9	99	2
Washington Barracks, D. C.	12		15	1	1	1		6	206	35	241	200	72	293	13.3	16.3	18	8	51.8	98	1
Fort Myer, Va.			40	1	1	11		11	413	64	477	8	65	300	1.3	4.0	16	6	58.3	99	14
Fort Monroe, Va.			2						2	2	4										
Temporary camps.																					
Total strength, admissions, &c.	20	7	475	10	15	104	7	149	4,180	787	4,967										
Total deaths	1						1	1													
Total discharges	1						1														
Ratios to 1,000 of mean strength.	6.7	2.4	159.6	3.4	5.0	84.9	2.4	50.1	1,404.1	264.4	1,668.5										
South Atlantic region.																					
Saint Augustine, Fla.	1		10	2		15	1	8	125	37	162	15	63	202	11.3	75.2	15	3	67.6	94	23
Total strength, admissions, &c.	1		10	2		15	1	8	125	37	162										
Total deaths																					
Total discharges							1														

APPENDIX C—Wherein are given for the year 1885 all military stations, their mean strength of command, &c.—Continued.

Station.	Heat-stroke.	Frost-bite and general freezing.	Contusions and sprains.	Dislocations.	Fractures (not gun-shot).	Incised, lacerated, and punctured wounds.	Shot wounds.	All other injuries.	Admitted for—			Altitude of stations.	Number of wet days.	Number of dry days.	Number of days high wind.	Number of days calm.	Thermometric variations, daily mean for the year.	Number of great thermometric ranges during the year.	Mean temperature.	Temperature.	
									Diseases.	Injuries.	Total.									Highest.	Lowest.
South Pacific coast region.																					
San Diego Barracks, Cal.			3			1			41	4	45	Feet. 150	20	345		18.3	° F. 14	° F. 5	° F. 62.2	° F. 89	° F. 38
Total strength, admissions, &c.			3			1			41	4	45										
Total deaths																					
Total discharges																					
Ratios to 1,000 of mean strength.			66.7			22.2			911.1	88.9	1,000.0										
Lake region.																					
Fort Brady, Mich.	1	11				3			85	15	100	800	69	296	5.0	0.3	23	8	36.9	88	—41
Fort Mackinac, Mich.	4	8				2		2	45	16	61	728	85	280	6.0	14.3	16	11	38.1	86	—33
Fort Wayne, Mich.	2	16			2	3			161	25	186	580	75	290	5.7	2.0	16	3	46.9	89	—12
Fort Niagara, N. Y.		3			1	2		3	44	9	53	271	71	294	0.3		16	4	43.6	88	—13
Fort Porter, N. Y.		8	1		2	1	1	1	78	14	92	660	112	253	23.0	1.3	14	8	43.4	87	—13
Fort Ontario, N. Y.		2				2		1	41	5	46	282	118	247	14.0	4.0	15	11	42.3	90	—14
Madison Barracks, N. Y.	1	25			5	6		14	274	51	325	262	74	291	0.3		19	6	40.9	90	—30
Plattsburg Barracks, N. Y.		2	1			1			18	4	22	186	73	292	4.7		18	16	40.5	95	—27
Headquarters Department of the Missouri, Chicago, Ill.									4		4										
Total strength, admissions, &c.	8	75	2		10	20	1	23	750	139	889										
Total deaths								2													
Total discharges		2	1			1															
Ratios to 1,000 of mean strength.	9.2	86.6	2.3		11.5	23.1	1.2	26.6	866.1	160.5	1,026.6										
River region north.																					
Poplar River Camp, Mont.			13		2	3		4	144	22	166	2,030	38	827	4.0	23.0	26	19	88.5	95	—63
Fort Buford, Dak.		6	46		3	12		2	197	70	267	1,900	40	325	9.7	8.3	24	10	89.9	96	—45
Fort Custer, Mont.	2	4	73	1	3	17	1	26	574	127	701	3,040	34	831	4.3	6.7	29	11	46.3	100	—32
Fort Keogh, Mont.		2	56	1	4	19	5	21	826	107	433	2,536	15	350	7.7	169.3	23	9	44.7	104	—50
Fort Abraham Lincoln, Dak.		3	86		1	12	1	11	258	64	322	1,914	27	838	4.7	46.0	21	13	89.5	97	—36
Fort Yates, Dak.		3	28		1	9	1	10	171	47	218		24	841			25	7	40.7	98	—34

Fort Bennett, Dak		2		2	5		3	38	12	50	1,510	28	306	7.3	24.7	24	13	45.0	102	40
Fort Sully, Dak		3	26	1			11	160	54	214	1,678	37	328	20.3	127.0	26	17	45.0	104	34
Fort Randall, Dak			85	2		13	1	164	72	236	1,245	31	334	1.0		27	9	45.7	107	33
Fort Pembina, Dak	1	3	16			6	1	10	98	37	135	900	40	325	10.0	16.0	22	10	33.4	91
Fort Totton, Dak		4	19			2	6	1	1	214	33	247	1,480	39	326	26.8	14.3	21	9	34.9
Fort Sisseton, Dak		1	8			2	1	2	135	14	149	2,000	43	322	(*)	(*)	(f)	(f)	38.2	96
Fort Snelling, Minn	2	13	43	2	1	21	3	26	213	111	324	840	47	318	1.0	43.3	19	6	42.0	95
Headquarters Department of Dakota, Fort Snelling, Minn																				
Fort Omaha, Nebr	1	3	55	1		16	3	12	397	91	488	960	50	315	6.3	13.0	18	5	47.9	98
Headquarters Department of the Platte, Omaha, Nebr	1	2	2			3		1	14	7	21	960	50	315	6.3	13.0	18	5	47.9	98
Fort Leavenworth (post), Kans	2	4	66			4	15	2	746	104	850		53	312	1.3	56.3	20	8	51.1	98
Fort Leavenworth (prison guard), Kans			7			1	3		70	11	81	844								
Leavenworth, Kans									16		10		3,800	22	343	1.3	9.3	17	2	46.8
Fort Riley, Kans	2	19	1	1	11	2	10	260	46	306	1,300									
Fort Hays, Kans	2	7		2	4		3	70	18	88	2,107									
Fort Lyon, Colo	1	23	1		4		5	161	34	195	3,800						31	23	52.8	105
Rock Island Arsenal, Ill		4						110	4	114	528	60	305	1.3	9.3	17	2	46.8	97	18
Jefferson Barracks, Mo	2	8	106	2	8	18	5	1,568	167	1,735	475	59	306	6.7	3.0	17	3	54.6	97	10
Indianapolis Arsenal, Ind					2		5	85	7	92	698	73	292		18.0	18	9	49.3	95	11
Newport Barracks, Ky		2		1			3	26	6	32	588	83	282	3.0	31.0	17	9	50.0	97	10
Columbus Barracks, Ohio	1	3	35	2	2	9	1	9	757	62	819	740	73	292	4.0	2.0	18	10	48.7	97
Allegheny Arsenal, Pa		1	2	2	1		2	14	8	22	704	107	258	0.3	43.7	19	13	50.8	99	9
Watervliet Arsenal, N. Y		1	5			1	5	63	12	75	50									
Temporary camps	1	1	19		5	2	5	160	33	193										
Total strength, admissions, &c.	13	68	748	16	39	228	31	237	7,209	1,380	8,589									
Total deaths		2				3	7	5												
Total discharges		1	1		3		5	2												
Ratios to 1,000 of mean strength.	2.3	11.9	130.4	2.8	6.8	39.8	5.4	41.3	1,257.0	240.6	1,497.6									
River region south.																				
Fort Elliott, Tex.		2	6	2		4		70	14	84	3,674	30	335	16.0	25.3	23	8	54.4	99	6
Fort Supply, Ind. T.		5	45			18	1	323	82	405	2,300									
Fort Reno, Ind. T.	8	7	39		1	12		21	434	83	517	36	329	2.0	43.0	23	9	57.3	99	5
Fort Sill, Ind. T.		1	13		1	17	3	4	390	39	429	31	334	15.7	41.3	23	5	58.1	103	1
Fort Gibson, Ind. T.			24			3		6	213	33	246									
San Antonio, Tex.			44			10		4	262	58	340	25	250	1.0	10.7	21	2	71.3	98	26
Fort McIntosh, Tex.			12	1		8	1	1	170	23	193									
Fort Ringgold, Tex.			34	3		12	2	16	357	67	424	82	333		26.0	19	7	72.5	109	24
Little Rock Barracks, Ark.			22		1			5	82	28	110	40	325	0.3	48.0	19	3	61.0	100	10
Augusta Arsenal, Ga			1					2	22	3	25	58	307		56.0	22	4	61.6	101	15
Temporary camps		20	27		3	8	1	8	123	67	190									
Total strength, admissions, &c.	8	35	267	6	6	92	8	80	2,466	497	2,963									
Total deaths							3	1												
Total discharges		1			1	1														
Ratios to 1,000 of mean strength.	1.6	18.7	143.0	3.2	3.2	49.3	4.3	42.8	1,320.8	266.2	1,587.0									

* Unreliable.

† No maximum thermometer.

South plateau and mountain region.																				
Fort Mojave, Ariz.....	1			1	1	4	46	7	53	600	3	362	4.0	132.3	29	4	73.3	115	30	
Whipple Barracks, Ariz.....	22		5	10		3	191	40	231	5,340	13	352	3.7	117.3	29	4	53.3	98	4	
Fort McDowell, Ariz.....	5		2		1	4	59	12	71	1,800	6	359	0.7	179.0	37	2	69.7	116	16	
Fort Lowell, Ariz.....	10			8	1	5	157	24	181	2,530										
Fort Grant, Ariz.....	62		2	30	3	10	239	107	346	3,859		21	344	5.0	1.3	15	1	60.6	100	22
Fort Bliss, Tex.....	23			3	4	8	182	38	220	3,600										
Camp Rice, Tex.....	14		1	3	2	2	67	22	89											
Fort Davis, Tex.....	51		1	19	3	23	497	97	594	4,700	20	345	5.7	29.0	26	3	60.3	98	5	
Fort Stockton, Tex.....	2	22		1	7	12	104	44	148	4,950										
Pena Colorado, Tex.....	4			7		1	34	12	46											
Fort Concho, Tex.....	33			22	2	14	280	71	351	1,950	27	338	5.7	11.3	27	6	63.5	108	2	
Camp Del Rio, Tex.....	7		4	2			45	13	58											
Fort Clark, Tex.....	2	96	1	2	24	6	39	759	170	929	1,000									
Camp at Langtry, Tex.....	7		1			1	16	9	25											
Fort Union, N. Mex.....	17			7		6	112	30	142	6,700	22	343	2.0		31	5	49.3	94	24	
Fort Marcy, N. Mex.....	4			3		6	56	13	69	6,846	24	341	1.0	6.0	22	1	47.7	88	3	
Fort Wingate, N. Mex.....	83		4	14	2	22	424	125	549	6,649										
Fort Verde, Ariz.....	16		1	5		8	150	30	180	3,160										
Fort Apache, Ariz.....	1	26	1	1	7	2	16	105	54	159	5,475	18	347	0.7	23.0	32	5	54.1	101	12
San Carlos, Ariz.....	2					1	17	3	20											
Fort Thomas, Ariz.....	32		1	9		5	170	47	217	2,710	9	356	0.3	79.0	33	3	61.9	106	16	
Fort Bowie, Ariz.....	1	9		2	6	3	1	78	22	100	4,826									
Fort Huachuca, Ariz.....	19	3	1	4	3	3	156	33	189	5,172										
Fort Bayard, N. Mex.....	27	1		10	5	8	221	51	272	6,040										
Fort Selden, N. Mex.....	9		1	1		1	64	12	76	4,250										
Fort Stanton, N. Mex.....	3	27	1	5	9	1	10	142	56	198	7,500									
South Fork, N. Mex.....	1					1	3	2	5											
Temporary camps.....	11	1	2	12	7	12	151	45	196											
Total strength, admissions, &c.....	3	6	640	8	37	223	46	226	4,525	1,189	5,714									
Total deaths.....					2		14	4												
Total discharges.....		3		2		6	2													
Ratios to 1,000 of mean strength.....	0.7	1.5	157.6	2.0	9.1	54.9	11.3	55.7	1,114.5	292.9	1,407.4									
In the field and en route.....	8		66	2	4	16	5	33	418	134	552									
Total strength, admissions, &c.....	8		66	2	4	16	5	33	418	134	552									
Total deaths.....							4	2												
Total discharges.....																				
Ratios to 1,000 of mean strength.....	7.4		61.5	1.9	3.7	14.9	4.7	30.7	389.2	124.8	514.0									
Deaths at large.....																				
Discharges at large.....																				

APPENDIX D.—*Tabular summary showing all rejections with cause occurring among 16,805 recruits examined during the calendar year 1885.*

[Total number of recruits examined, **16,805**; white, **15,648**; colored, **1,157**.]

Causes and ratios of rejection per 1,000 of all recruits examined.	White.				Colored.			
	Rejected on primary examination.	Rejected on secondary examination at recruiting depots.	Total.	Ratio per 1,000 rejected.	Rejected on primary examination.	Rejected on secondary examination at recruiting depots.	Total.	Ratio per 1,000 rejected.
ZYMOTIC DISEASES.								
<i>Miasmatic diseases.</i>								
Total	5		5	0.32				
Malarial fever	2		2	0.13				
Malarial cachexia	2		2	0.13				
Diarrhea, chronic	1		1	0.06				
<i>Enthetic diseases.</i>								
Total	455	3	458	29.27	69		69	59.63
Syphilis	370	3	373	23.84	56		56	48.40
Other venereal diseases	85		85	5.43	13		13	11.24
<i>Dietic diseases.</i>								
Total	370		370	23.64	7		7	6.05
Alcoholism and results	369		369	23.58	7		7	6.05
Scurvy	1		1	0.06				
<i>Constitutional diseases.</i>								
Total	25	1	26	1.66	6		6	5.19
Anæmia	1		1	0.06				
Rheumatism	5	1	6	0.38				
Scrofula	14		14	0.89	6		6	5.19
Tumors	5		5	0.32				
<i>Developmental diseases.</i>								
Total	830	8	838	53.55	58		58	50.13
Imperfect mental development	47	1	48	3.07	8		8	6.91
Imperfect physical development	782	7	789	50.42	48		48	41.49
Other diseases of this class	1		1	0.06	2		2	1.73
<i>Diseases and injuries of the brain and nervous system.</i>								
Total	49	2	51	3.26	4		4	3.46
Headache, chronic	2	1	3	0.19				
Paralysis	3	1	4	0.26				
Locomotor ataxia	1		1	0.06				
Vertigo	1		1	0.06				
Nervous irritability	2		2	0.13				
Other diseases of this class	40		40	2.56	4		4	3.46
<i>Diseases of the eye.</i>								
Total	582		582	37.19	22		22	19.01
Cataract	2		2	0.13				
Conjunctiva, diseases of	19		19	1.21	1		1	0.86
Pterygium	2		2	0.13				
Cornea, opacity of	2		2	0.13				
Iritis	9		9	0.58				
Astigmatism	5		5	0.32				
Myopia	71		71	4.54	1		1	0.86
Strabismus	5		5	0.32				

APPENDIX D.—*Tabular summary showing all rejections with cause, &c.—Continued.*

Causes and ratios of rejection per 1,000 of all recruits examined.	White.				Colored.			
	Rejected on primary examination.	Rejected on secondary examination at recruiting depots.	Total.	Ratio per 1,000 rejected.	Rejected on primary examination.	Rejected on secondary examination at recruiting depots.	Total.	Ratio per 1,000 rejected.
ZYMOTIC DISEASES—Continued.								
<i>Diseases of the eye—Continued.</i>								
Color blindness	1	.....	1	0.06	.....	.....	.....	.....
Day blindness	1	.....	1	0.06	.....	.....	.....	.....
Impaired vision	465	.....	465	29.72	20	.....	20	17.29
<i>Diseases of the ear.</i>								
Total	157	4	161	10.29	3	.....	3	2.59
Ear, middle inflammation of	2	.....	2	0.13	.....	.....	.....	.....
Deafness	151	4	155	9.91	3	.....	3	2.59
Earache	3	.....	3	0.19	.....	.....	.....	.....
Ear, polypus of	1	.....	1	0.06	.....	.....	.....	.....
<i>Diseases of the nose.</i>								
Total	21	.....	21	1.34	.....	.....	.....	.....
Nasal catarrh, chronic	17	.....	17	1.09	.....	.....	.....	.....
Nasal hemorrhage	2	.....	2	0.13	.....	.....	.....	.....
Nasal polypus	2	.....	2	0.13	.....	.....	.....	.....
<i>Diseases of the respiratory system.</i>								
Total	323	2	325	20.77	31	.....	31	26.79
Chest, insufficient capacity of	232	.....	232	14.83	27	.....	27	23.24
Chest, malformed	43	.....	43	2.75	1	.....	1	0.86
Emphysema	1	.....	1	0.06	.....	.....	.....	.....
Consumption	23	2	25	1.60	2	.....	2	1.73
Lungs, disease of, and results	24	.....	24	1.53	1	.....	1	0.86
<i>Diseases of the circulatory system.</i>								
Total	811	9	820	52.40	38	.....	38	32.84
Heart disease, functional	75	3	78	4.98	2	.....	2	1.73
Heart, hypertrophy of	9	2	11	0.70	.....	.....	.....	.....
Heart, valvular disease of	33	.....	33	2.11	2	.....	2	1.73
Heart disease (not specified)	102	.....	102	6.52	8	.....	8	6.91
Pericarditis and results	1	.....	1	0.06	.....	.....	.....	.....
Varicose veins	590	4	594	37.96	26	.....	26	22.47
Aneurismal varix	1	.....	1	0.06	.....	.....	.....	.....
<i>Diseases of the digestive system.</i>								
Total	771	6	777	49.65	54	.....	54	46.67
Dental insufficiency	247	1	248	15.85	23	.....	23	19.88
Diseases of the mouth and tongue	5	.....	5	0.32	.....	.....	.....	.....
Pharyngitis	22	.....	22	1.41	2	.....	2	1.73
Tonsillitis	15	.....	15	0.96	2	.....	2	1.73
Dyspepsia	1	.....	1	0.06	.....	.....	.....	.....
Constipation	1	.....	1	0.06	.....	.....	.....	.....
Fistula in ano	21	.....	21	1.34	2	.....	2	1.73
Hemorrhoids	243	2	245	15.66	12	.....	12	10.37
Hernia	165	1	166	10.61	11	.....	11	9.51
Relaxed inguinal rings	81	.....	81	1.98	1	.....	1	.88
Relaxed abdominal rings	12	.....	12	0.77	.....	.....	.....	.....
Weakness of abdominal walls	2	.....	2	0.13	.....	.....	.....	.....
Rectal inflammation	3	.....	3	0.19	.....	.....	.....	.....
Jaundice .....	.....	.....	.....	.....	1	.....	1	0.86
Disease of the liver	1	.....	1	0.06	.....	.....	.....	.....
Enlargement of the spleen	1	.....	1	0.06	.....	.....	.....	.....
Dropsy	3	.....	3	0.19	.....	.....	.....	.....

APPENDIX D.—Tabular summary showing all rejections with cause, &c.—Continued.

Causes and ratios of rejection per 1,000 of all recruits examined.	White.				Colored.			
	Rejected on primary examination.	Rejected on secondary examination at recruiting depots.	Total.	Ratio per 1,000 rejected.	Rejected on primary examination.	Rejected on secondary examination at recruiting depots.	Total.	Ratio per 1,000 rejected.
ZYMOtic DISEASES—Continued.								
<i>Diseases of the lymphatic system.</i>								
Total	29		29	1.85	1		1	0.86
Goiter	4		4	0.26				
Enlarged cervical glands	25		25	1.60	1		1	0.86
<i>Diseases of the reproductive system and urinary organs.</i>								
Total	654	4	658	42.05	32	1	33	28.52
Bright's disease	2		2	0.13	1		1	0.86
Gravel	1		1	0.06				
Incontinence of urine	5	1	6	0.33				
Urethral stricture	4	1	5	0.22				
Testicles, malformed	9		9	0.53	2		2	1.73
Testicles, undescended	21		21	1.34		1	1	0.86
Testicles, inflammation of	27		27	1.73	1		1	0.86
Genitals deformed	33		36	2.30	3		3	2.59
Phimosis	34	1	35	2.24	1		1	0.86
Hydrocele	16		16	1.02	2		2	1.73
Varicocele	499	1	500	31.95	22		22	19.01
<i>Diseases and injuries of the locomotor system.</i>								
Total	1,105	9	1,114	71.19	75	1	76	65.69
Anchylolysis	8		8	0.51	4		4	3.46
Bones, disease of (not specified)	1		1	0.06				
Bones of extremities, disease and injury of	40	4	44	2.81	5		5	4.32
Curvature of spine	147		147	9.39	6	1	7	6.05
Deformity of lower extremities	111	1	112	7.16	18		18	15.56
Deformity of upper extremities	58		58	3.71	2		2	1.73
Deformity of feet and toes	610	3	613	39.17	38		38	32.84
Deformity of hands and fingers	29		29	1.85				
Loss of fingers and toes	34		34	2.17	2		2	1.73
Joints, disease and injury of	65	1	66	4.22				
Muscular contractures	1		1	0.06				
Muscular tenuity, special	1		1	0.06				
<i>Diseases of the integumentary system.</i>								
Total	335	3	338	21.60	23		23	19.88
Bromidrosis	7		7	0.45				
Corns and bunions	126	2	128	8.18	7		7	6.05
Ingrowing nail	45	1	46	2.94	2		2	1.73
Ulcers and cicatrices	50		50	3.20	5		5	4.32
Tumors, keloid	6		6	0.38	1		1	0.86
Skin diseases (not specified)	101		101	6.45	8		8	6.91
<i>Injuries, results of.</i>								
Total	3		3	0.19				
Frost-bite	2		2	0.13				
Gunshot wound	1		1	0.06				
<i>Unclassified.</i>								
Total	4	2	6	0.38				
General debility	2	2	4	0.26				
Masturbation	2		2	0.13				

APPENDIX D.—Tabular summary showing all rejections with cause, &c.—Continued.

Causes and ratios of rejection per 1,000 of all recruits examined.	White.				Colored.			
	Rejected on primary examination.	Rejected on secondary examination at recruiting depots.	Total.	Ratio per 1,000 rejected.	Rejected on primary examination.	Rejected on secondary examination at recruiting depots.	Total.	Ratio per 1,000 rejected.
ZYMOTIC DISEASES—continued.								
<i>Other disqualifications.</i>								
Total	2,439	1	2,440	155.93	170	.....	170	146.93
General unfitness	1,040	1	1,041	68.53	59	.....	59	50.99
Age, over	114	.....	114	7.29	8	.....	8	6.91
Age, under	370	.....	370	23.65	29	.....	29	25.06
Height, over	28	.....	28	1.79	4	.....	4	3.46
Height, under	239	.....	239	15.27	26	.....	26	22.47
Weight, over	49	.....	49	3.13	5	.....	5	4.32
Weight, under	189	.....	189	12.08	13	.....	13	11.24
Imperfect knowledge of English	264	.....	264	16.87	.....	.....	.....	.....
Character, discharged without	8	.....	8	0.51	.....	.....	.....	.....
Character, doubtful	8	.....	8	0.51	2	.....	2	1.73
Disability, moral	43	.....	43	2.75	12	.....	12	10.37
Disability, previous discharge for	6	.....	6	0.38	.....	.....	.....	.....
Convict, ex-military	7	.....	7	0.45	.....	.....	.....	.....
Deserter from United States Army	6	.....	6	0.38	.....	.....	.....	.....
Deserter from other army	2	.....	2	0.13	.....	.....	.....	.....
Fraudulent enlistment	2	.....	2	0.13	.....	.....	.....	.....
Married	54	.....	54	3.45	11	.....	11	9.51
Widower with children	5	.....	5	0.32	1	.....	1	0.86
Would not enlist because comrade was rejected	5	.....	5	0.32	.....	.....	.....	.....
Aggregate	8,968	54	9,022	576.56	593	2	595	514.26

NOTE.—The discrepancy between the reports of the Adjutant-General and the Surgeon-General as to the total number of recruits rejected is due to the fact that every applicant for enlistment that is rejected, either on preliminary or final examination, is reported to the Adjutant-General, whereas usually only those are reported to the Surgeon-General who are rejected after a physical examination.

APPENDIX E.—SPECIAL REPORTS BY MEDICAL OFFICERS OF THE ARMY FOR THE YEAR 1885.

No. 1.—Abstract of sanitary reports from Fort Douglas, Utah, showing the relation of the hygienic condition of that station to the prevalence of typhoid fever. By Surgeon F. Meacham, U. S. Army.

Under date October 31, 1883, the medical officer made the following report to the post adjutant:

In compliance with General Order No. 125, Adjutant-General's Office, Washington, D. C., November 17, 1874, I have the honor to report that, during the present month, I have examined all the buildings belonging to the post, and find the general sanitary condition to be good, with two exceptions, viz:

(1) The plan of ventilation of the dormitories occupied by the enlisted men is not of the right kind, and the means of ventilation provided are not properly used to derive the greatest amount of benefit therefrom. The means of ventilation provided are by doors and windows for ingress of fresh air, and openings through the ceilings for the escape of foul air. At an inspection made by the commanding officer and myself, about midnight of the 23d instant, it was found that all the doors and all the windows, with very few exceptions (so few as to be practically useless), and a majority of the openings through the ceilings were closed, and the air in all the dormitories more or less offensive, in some very offensive. I would respectfully recommend it be made the duty of company commanders, until proper ventilation can be provided, to see that a sufficient number of windows on each side (at least one-half of them) be opened at the top for a distance of 8 inches, from taps until reveille, except on very cold and stormy nights,

when only those on the leeward side need be opened; the number to be left to their discretion. I also recommend that a system of ventilation similar to that used in the ward of the post hospital at this post be provided for each dormitory as soon as possible.

(2) There are in each of the seven buildings occupied as barracks three openings communicating with the main sewer, viz: one each from the kitchen sink, bath-tub, and wash hand sink, *twenty-one in all.* *Of these but four are trapped, none of them are ventilated, and therefore nearly useless, as they are siphoned and unsealed when communicating pipes are used.* In addition to these there is, at the rear of each set of officers' quarters, a basin or receptacle for slops, which communicates with the sewer direct; that is, with no intervening trap. Until quite recently, the stench from these places has been intolerable. On the 24th instant the commanding officer directed that the sewers be flushed every night. This has mitigated the evil complained of greatly, but has not completely overcome it. I recommend that each outlet in the barracks be fitted with a ventilating or draft pipe, to extend from below each trap to about 3 feet above the highest part of the roof; that this be done as soon as possible; that the flushing be continued, and that the slop receptacles be trapped before the approach of warm weather. My attention was especially directed to the ventilation of the dormitories and to the sewers by the prevalence of typhoid fever among the enlisted men of the command and the families of officers. Sixteen cases in the former, with two deaths, and four in the latter. The families of soldiers have escaped. This disease is usually considered to be a filth disease and preventable. I believe that if the foregoing recommendations are carried out, it will be eliminated. The quality of the ration is good and the cooking well done. The quality of the water is good and supply abundant.

November 5, 1883.—I have the honor to report that Acting Assist. Surg. A. R. Chapin, U. S. Army, and myself inspected the dormitories of this post between the hours of 12 and 1 o'clock last night, and find their condition as follows:

H Company: Two ventilators and one window open; air not very foul; pipes open.

A Company: Ventilators all open and windows all closed, except one, which was opened about 2 inches from the top; air very foul.

F Company: One ventilator open, windows all closed; air of dormitory very offensive, of tailor shop worse; orders in regard to pipes in bath-room not complied with.

Guard-house: Air of guard-room fair; of prison-room very foul.

D Company: Seven windows slightly open at the top; ventilators open. An effort had evidently been made to obtain fresh air, which was partially successful. Pipes in bath-room open, except one at the bottom of bath-tub.

B Company: Windows closed; ventilators partly open. Chief source of ventilation by open door from dormitory in bath-room. Pipes only partially closed.

G Company: Two windows and three ventilators open; pipes not closed. Squad-room downstairs, in which eight men were sleeping, had no ventilation. All doors and windows closed tightly; air very offensive.

Band: Ventilators open; windows closed; air of dormitory fairly good; overflow in bath-tub not closed.

November 30, 1883.—In compliance with General Order No. 125, Adjutant-General's Office, Washington, D. C., November 17, 1874, I have the honor to report that the general sanitary condition of the post is as reported last month. So far as I am able to ascertain, no action has been taken on recommendations made at that time. The plumbing in the barracks remains in the same dangerous condition. But little attention is given to the ventilation of the dormitories, as was found by me at an inspection made after midnight on the 4th instant, a report of which was made to your office, and again on the night of the 18th instant. The plumbing, so far as it has been done in the new quarters, is of the same style as in the old, no regard evidently being paid the preservation of health. The daily flushing of the sewers, commenced on the 24th instant, has diminished the offensive odors from them and rendered them less dangerous. In consequence, the number of sick has decreased notably, and the type of disease has become of a less serious nature, though many cases of septic origin still appear. The so-called dry-earth closets are unsuitable, offensive to both sight and smell, dangerous to health, as well as indelicate from the mode of operating them. The mischief done by defective sewerage and plumbing cannot be measured by the number of deaths that ensue; that is the least part of the result, as in the battle the killed bear but a small proportion to the wounded. There are many cases of headache, neuralgia, diarrhea, as well as the more serious typhoid fever, diphtheria, cholera, and even pulmonary consumption caused by it, that leave lasting injuries that are often not detected until the evil is irreparable. The location of this post is such that its drainage is as nearly perfect as nature can make it. It only remains for art to step in and by the proper expenditure of a moderate amount of money, under the supervision of a competent sanitary engineer, to make its sanitary condition as near perfection as modern sanitary science can do. The supply of water is good and abundant, and for all practicable purposes inexhaustible.

As the preservation of the health of the garrison should be the first care of its commanding officer and surgeon, I have the honor to make the following recommendations: (1) That a competent sanitary plumber be employed to prepare plans and specifications for the work necessary to be done to place this post in the best sanitary condition possible. (2) That the necessary steps be taken at once for doing this work.

I cannot urge too strongly the importance of having this work done before the approach of warm weather. The past season has been the first since the completion of the sewers. The number of cases of typhoid fever has been twenty-one, with two deaths. The same condition of affairs, during a second season, would naturally cause a much larger number. During the cold weather the flushing of sewers could be done during the day, instead of the night, as heretofore. The ventilation of the dormitories by means of the windows, as recommended last month, should receive attention until a suitable system is introduced.

[Extracts from the Annual Sanitary Report for year ending December 31, 1883.]

Par. No. 10. Kitchens sufficient and kept in good condition, except that the discharge pipes from the kitchen sinks connected with the sewer are untrapped and unventilated, and permit the free escape of sewer gas into the kitchen.

Par. No. 12. Each set of barracks and the band quarters are provided with a bath-room, furnished with a stove, iron bath-tub, and zinc-lined lavatory. Water for bathing purposes is heated in boilers on top of stoves. The discharge pipe from the bath-tubs and lavatories, like those from the kitchen sinks, communicate directly with the sewer, with no intervening traps. The odor of sewer gas is very perceptible in these and adjoining rooms, and was probably the chief cause of the typhoid fever referred to above.

Par. No. 32. At the rear of each set of barracks and officer's quarters there is what is intended to be a dry earth-closet. It proves, however, impracticable to keep them dry; as a consequence, they become foul and offensive. In cold weather the earth or sand freezes so hard that it is impossible for the operator to cover the deposit, which is expected to be done with a small shovel or scoop. The fecal matter adheres to the boxes, which become filthy and disgusting to both sight and smell. More or less of the contents of the boxes is dropped in the vicinity of the privies when they are emptied; this will in time saturate the ground and contribute to the unhealthfulness of the post. At the rear of each set of married soldier's quarters, and of the hospital, is a privy with a deep pit; these are objectionable for the reason that, as the pits fill up, new ones must be dug, thus saturating the ground with fecal matter and producing the attendant bad results. The urinals consist of V-shaped wooden troughs, lined with zinc, and connected with the sewer by means of tin spouts which are untrapped. The wood-work of the trough and floor soon becomes saturated with urine, which decomposes and throws off its strong ammoniacal odors; so that the unfortunate man who is compelled to use the sink must sit among the odors of decomposing and fresh fecal matter, stale urine, and sewer-gas. The only water-closets, properly so called, are in the quarters of the commanding officer; these are the old-fashioned pan-closet, are unventilated and unsafe. The soil-pipe does not extend above the closet; it should extend above the highest part of the roof. There are no facilities for flushing sinks and privies.

Par. No. 33. Surface drainage is good from natural slope of ground to the west. The sewage from kitchens and bath-rooms is carried by means of a 12-inch terra-cotta drain-pipe to the ravines just below the post. The connections with the sewers are very imperfect, and really dangerous, as they open directly into the kitchens and bath-rooms. They are not properly trapped, and none of them are ventilated. The odor of sewer-gas becomes very perceptible after the rooms have been closed a short time. Beside these openings directly into the houses, there is, near the kitchen door of each of the officer's quarters, a 4-inch opening, about 2 feet above the ground, communicating directly with the sewer and surmounted by a funnel-shaped strainer or hopper for the reception of slops. The odor from these openings in warm weather is terrible. This odor comes partly from the decomposing slops spilt on the wood-work supporting these hoppers, but principally from the sewer itself. The hoppers are of iron, unglazed, and have no facilities for being flushed. The sewers are flushed at irregular intervals. There is a sewer leading from the quarters of the commanding officer to the ravine in the rear of the barracks on the west side of the garrison; this is not ventilated.

Par. No. 54. There are no water-closets or urinals, properly so called. A sink is located in the southeast corner of the hospital yard; it is a small building over a pit. No drainage.

Recommendations regarding matters affecting the sanitary condition of the post.

It is recommended that boxes be constructed under the floors of the dormitories, leading from the outside of the building to an opening under the stoves, for the ingress of fresh air; this, in connection with ridge ventilation, is the plan adopted by the medical department of the Army for the ventilation of wards in hospitals, and seems to work very well, though it is undoubtedly at the expense of a vast amount of heat. The discharge-pipes from the kitchen sinks, lavatories and bath-tubs should be trapped and ventilated by means of a 2-inch pipe leading from just below the trap to a short distance above the roof. The sewer should also be ventilated, and a fresh-air pipe placed at every point where it enters a building, thirty-nine in all, as shown in plan where red lines touch buildings. This work should be done at once, and must be done before the approach of warm weather. It has been suggested by the commanding officer that estimates will be made this season for raising the wings of the officer's quarters a half story, thus providing a place for a bath-room and servant's room, both of which are very much needed. It is recommended that the work be done, and that a water-closet be placed in each bath-room. This will do away with the necessity of the objectionable earth-closets and slop-receptacles which now pollute the air about the officer's quarters. In the prison-room of the new guard-house there should be placed a urinal supplied with running water. The wood-work about this should be protected from the absorption of urine by some non-absorbent material, such as sheet-lead, plate-glass, or slabs of slate, glass having the preference. There should also be placed in some convenient place of the building a water-closet for the use of both guard and prisoners; these appliances to have proper connections with the east branch of the sewer.

The water for the use of the garrison should be drawn through a large filter of gravel and charcoal before entering the main supply-pipe, thus freeing it from impurities with which it may become impregnated before and after entering the reservoir. The experience of the last summer shows that a large amount of vegetable matter is deposited in the reservoir, giving an unpleasant taste and odor to the water. It is also very turbid after a rain storm. Both these impurities would be removed by the filter. The reservoir should be emptied and cleaned at least once every year.

The present sinks or earth-closets should be replaced by water-closets and urinals provided for the use of enlisted men. The soil in the vicinity of the present sinks should be removed to a depth of about 6 inches, and renewed by fresh earth to get rid of that which has been more or less saturated with filth.

If the quarters now occupied by the families of married soldiers are to be permanently used they should be provided with water-closets, connected with the main sewers, so that the filth which is now contaminating the soil above the post may be carried to a safe distance below; if this cannot be done the buildings should be removed to the rear of the shops or abandoned altogether.

The old style pan-closets in the commanding officer's quarters should be removed; a 4-inch soil-pipe should extend above the roof, and proper ventilating pipes should extend from traps on discharge-pipes, from bath-tubs and kitchen sinks. Proper connections should also be made with sewer, and the latter ventilated.

The sewers should be ventilated by 4-inch cast-iron pipes, leading from the vicinity of the 10-inch openings in the rear of quarters Nos. 10 and 11 to a short distance above the roofs of those quarters; 10-inch pipes provided with traps should enter at the same places for the purpose of flushing the sewers when required. The sewers from the hospital and the commanding officer's quarters should be extended to join the main sewer on the west side. The main sewers should extend a much greater distance below the post before discharging their contents. The hospital sink is situated 60 yards distant from the back entrance to the building; it is so far away that all the sick and most of the convalescent are compelled to use close stools, which must be emptied by the nurses. As the wards are on the second floor of the building, the inconvenience must be apparent. There is no place in the building for emptying urinals or other slops that cannot pass through the bath-tub; everything must be carried down stairs, through the hall, and sixty yards to the sink. The plumbing in the hospitals is very imperfectly done, so that the odor of sewer gas is noticeable throughout the building when the discharge-pipes are open; it is necessary to keep them plugged; this renders the bathing and washing facilities nearly useless. Estimates for putting the plumbing of the hospital in perfect order have been forwarded. They are made for tidal-wave water-closets, urinals, wash hand-basins, bath-tub, iron sinks for kitchen and dispensary, with proper connections with the sewer, which is also to be properly ventilated. The bath-tub, water-closet, urinal, and wash hand-basin are to be put in the bath-room, which is on the second floor, between the wards, and will be a great convenience both for the sick and attendants.

In conclusion, I wish to say that when I joined this command, in the middle of October last, I found typhoid fever prevailing to an alarming extent. As this is generally

considered a filth disease and preventable, I commenced to look about for a cause. The first thing that attracted my attention was the foul odors arising from the slop receptacles and earth-closet in my own back yard. I then examined the plumbing in my own and other quarters, and found the same state of affairs to exist throughout the garrison that I have tried to describe in the accompanying pages. I learned from inquiries that the sewers and plumbing had been put in during the past winter and spring, and that this was the first season since their introduction; I also found that the flushing of the sewers had been neglected for some weeks before. I also examined the dormitories after midnight on several occasions, and found the ventilation bad. I considered this sufficient cause for the prevalence of the sickness, and made my sanitary report to the post adjutant October 31, 1883, accordingly. On the 24th of October the flushing of sewers was commenced again, with a marked decrease of odor, and since the very cold weather the earth closets have become so much frozen that the foul odors are reduced to a minimum, and will probably remain so until the warmth of spring unloosens them and sends them forth to spread "the pestilence that walketh in darkness, and the destruction that wasteth at noonday."

An examination of the records of this post since October 1, 1865, shows the total number of sick and the number of cases of typhoid fever in each year to be as follows, viz:

	Total taken sick.	Typhoid fever.		Total taken sick.	Typhoid fever.
1865 (three months)	233	1	1874	1,065	0
1866	707	23	1875	474	1
1867	210	1	1876	446	0
1868	294	2	1877	132	1
1869	404	7	1878	279	1
1870	559	7	1879	497	0
1871	1,028	9	1880	436	0
1872	911	23	1881	427	1
1873	1,373	0	1882	450	0

During the years from 1882 to 1886 the number of cases was as follows:

	1883.	1884.	1885.
Total taken sick	598	715	470
Typhoid fever	20	2	12

I can find no explanation for the prevalence of this disease in 1870 and 1871, but it is generally believed to have been due to the old log quarters then fast going to decay. Since that date only sporadic cases, occurring at long intervals, are reported. They may have originated here, or may have been imported; but during the past six months the cases have occurred as follows: July, 1; August, 8; September, 1; November, 2; December, 3; October, 8. During July and August the sewers were flushed, but not again until October 24. I think these facts sustain me in the opinion that the fever originated here, and depended wholly upon the defective ventilation, sewerage and plumbing; and that if the foregoing recommendations, or other measures, fully as sweeping are not carried out before the advent of warm weather, the fever will reappear in the early part of the season with more virulence than during the past. I cannot urge too strongly the necessity for prompt and vigorous action.

March 31, 1884. In compliance with G. O. No. 125, A. G. O., series 1874, I have the honor to report that I have examined the various buildings at the post and find their sanitary condition very much as reported at the end of October, November, and December, 1883. An attempt has been made to improve the sanitary condition of the barracks by putting traps on the discharge pipes leading from the kitchen sinks and lavatories, but as these traps are in many instances placed from 10 to 15 feet from the fixtures they are intended to protect, and are in no instance ventilated, they will fail to perform the work required of them because they will syphon and lose their seal whenever used. To make them perfectly safe there should be a running trap placed outside the building, on the house side of which there should be a fresh-air inlet

extending about 4 or 5 feet above the ground, and on the sewer side there should be a ventilating pipe the full size of the soil-pipe, extending to a short distance above the roof. The traps for fixtures should be placed as near each fixture as possible. From the crown of each trap a ventilating pipe of the size of waste-pipe should extend above the highest part of the roof. This latter could be done very easily and at small expense, and would increase the efficiency of the trap greatly. During the coming month the sewers should be flushed at least twice each week; as the weather becomes warmer it should be done more frequently. I also recommend that the quartermaster procure a quantity of chloride of lime to be used in disinfecting and deodorizing the sewers.

With the approach of warm weather the earth closets are becoming very offensive. Most of the buildings are old, having been used as privies several years, and are saturated with odors. I would respectfully recommend that these buildings be destroyed, and regular water-closets be erected to connect with the sewers as soon as the sewers are extended. Four buildings will be required, one at the rear of each of the following barracks: C, G, H, and K. They should be built of brick, with stone foundations and double walls. By having the pipes properly protected by mineral wool or asbestos and hair felt, there would be no danger from frost. Each building would contain six earthen hopper closets and two urinals, supplied with self-acting flushing tanks, which will keep them perfectly clean and odorless. The estimated cost of each of these buildings, if done by contract, is \$575, or \$2,300 for all. The estimated cost of plumbing them all is \$2,552.14; total cost, \$4,852.14. These buildings would be substantial and permanent, and would last as long as the barracks themselves. I cannot close this report better than by quoting the following extract from the sanitary engineer, March 13, 1884, viz:

"Sanitary work has developed into a science, having a great range of scientifically deducted rules and practically attained experience of success and failure recorded in its literature, and no local authority can act for the best interests of its community without the advice in detail of some competent person, who, knowing the results of experiences elsewhere, makes a special study of the case in hand, in order to formulate the best means for their application."

April 30, 1884. In compliance with A. R. 2315, I have the honor to report that I have examined the various buildings of the post, and find their sanitary condition to be as reported last month. The facilities for flushing the sewer have been improved so that they can be flushed with a 6-inch stream very readily. I respectfully recommend that each sewer be flushed every afternoon at a certain specified hour; that the water be allowed to run through each for a period of at least 15 minutes that the accumulation of the day may be washed out, and not suffered to remain until putrefaction commences. I also repeat my recommendations in regard to ventilation of the traps in the barracks and officer's quarters; I deem this of too great importance to be passed by without notice. Ventilating pipes should be put in at once, and the work should be done by skilled laborers. I wish to call attention to the so-called dry earth-closets; the troughs are in a filthy condition, the ground at the rear of the buildings is covered with fecal matter, dropped when the troughs are emptied; the stench from this cause and from the buildings themselves is very great. The urine escapes under the buildings in several instances, and is saturating the ground. The closet at the rear of the guard-house is in a particularly filthy condition. I repeat my recommendations in regard to water-closets made one month ago. The general policing of the post, with the above exceptions, is very good. The character and cooking of the rations and the quantity and quality of the water supply are good.

September 30, 1884. I have the honor to report that I have examined the various buildings of the post, as required by A. R. 2315, and find the general sanitary condition as reported April 30, 1884. It is especially recommended that the sewer pipes be connected and extended below the post for a distance of about 1,000 yards, so as to carry the sewage to a safe distance. The waste-pipes of the bath-room and kitchens of two barracks now empty on the surface, and in the winter the discharge will run under the barracks, saturating the ground with filth and making the locality very unhealthy. These could easily be connected with the sewer on the west side, when extended. This sewer now empties into a ravine a short distance at the rear of the third set of barracks on that side, and when the wind is from the west or southwest, fills the garrison on that side with foul air. The plumbing in the post hospital can be used only to a limited extent, because the sewer does not extend below the post. It was recommended December 31, 1883, and March 31, 1884, that water-closets be provided for the enlisted men, and that these closets be connected with the sewers. This recommendation is repeatedly and earnestly urged; it seems to be impracticable to keep the ground above the present earth-closets clean, much of the filth being dropped and mixed with the soil about them, and filling the air in their vicinity with foul air.

October 6, 1884. I have the honor to report that the *post mortem* examination made in the case of chief musician Louis Steigler, Sixth Infantry, showed that he died of

typhoid fever, instead of remittent fever, as diagnosed during life by his medical attendant. This is the fourth death that has resulted from typhoid fever, originating in the contiguous barracks of the band and H Company during the past thirteen and one-half months, three of which were in the band. These barracks are placed back to back, and separated by a space of 48 yards, the buildings at their upper ends being connected by a high board fence, making a sort of *cul-de-sac*, in which are placed two so-called dry earth-closets, used by H Company and the band, also a sink used by the clerks and others about the headquarters building and the school-children, altogether more than one hundred persons. When the boxes are emptied each morning more or less of the filth is scattered about on the ground, emitting foul odors. The troughs for urine in the earth-closets connect directly with the sewers by open pipes, which allow the escape of sewer-gas, mingled with odors of decomposing urine, altogether polluting the air in this space to a dangerous extent. In addition to the above, the sewer empties into the ravine just below the front of the band barracks, distant about 100 yards. When the wind is from the west or southwest the odors from this sewer are carried directly through this space, and are noticeable in the line of officer's quarters beyond. This accounts for the prevalence of the disease in the band and its greater malignancy there than elsewhere. All the privies at the post are in the same unhealthful condition as those mentioned above.

Attention has been called to the condition of these places and recommendations made for their improvement at various times, more especially in the Monthly Sanitary Reports, dated October 31, November 30, December 31, 1883, and March 31, 1884; the Annual Sanitary Report, December 31, 1883, and also in a report made by J. J. Farrell, a sanitary engineer, employed for that purpose, dated December 20, 1883; so that nearly a year has been allowed to elapse since this unhealthful sanitary condition of the post was pointed out, and, so far as I know, no steps have been taken to improve it, with the bare exceptions that the sewers have been regularly flushed twice each day. A number of traps have been put in, but, as none of them were properly ventilated, they might as well have remained on the shelves of the plumber; attention was called to their imperfect condition March 31, 1884. There is at present in the post-hospital a case of typhoid fever in a dangerous condition.

I respectfully repeat the recommendations made in the Annual Sanitary Report of December 31, 1883, and its accompanying paper (copy of report of sanitary expert), and advise that steps be taken at once to put the post in a thoroughly healthful sanitary condition.

December 14, 1884.—In compliance with instructions contained in Circular No. 44, C. S., Headquarters, Department of the Platte, I have the honor to inform you that I have examined the various sinks, sewers, and other places for the deposit of filth and garbage, about the post, and find their condition as follows: The sinks in use at the barracks and officers' quarters consist of wooden buildings, in which are placed iron boxes to receive excrementitious matter, which is covered with sand or earth; these boxes are emptied every morning; in doing this, much of the filth is scattered about on the ground at the rear of the buildings; this, together with the imperfect deodorization of the contents of the boxes, during hot weather fills the atmosphere in the vicinity with most offensive odors. The urinals in the closets used by the enlisted men empty directly into the sewer, with no intervening traps, so that the odors from the sewers can pass into the building freely. The tin work intended to conduct the urine into the boxes, in some cases, particularly the one used by H Company, is defective, and permits the urine to saturate the woodwork and ground under the building. The sewers discharge their contents in the immediate vicinity of the post, the one on the west side but a short distance to the rear of the middle set of barracks on that side, so that when the wind blows from the west or northwest the foul odors are carried into the post. The waste pipes from the kitchen sinks and bath-rooms are provided with traps, but as these traps are not properly ventilated, they leave the fixtures in a very dangerous condition. Owing to the unfinished condition of the main sewer, on the west side of the post, the water-closets in the post-hospital are not available for use, making it necessary for the sick to use the sink about sixty yards to the rear of the building. Owing to the same cause, the drainage of E and K Company barracks is in an imperfect and unsafe condition. The ground about the slop barrels in rear of the barracks used by A, C and F Companies was strewn with garbage, and more or less saturated with slops. Some of the sinks used by the families of enlisted men are nearly full; and some others are in a very filthy condition.

September 30, 1885.—I have the honor to report that I have inspected the post, as required by A. R. 2315, and find the general police of the grounds, especially around the barracks and guard-house, very poorly done. All the rooms of the guard-house are dirty, and the inside walls very much in need of whitewash. The urinals are clogged, causing them to stand full of urine. The end of the sewer pipe leading from them is

covered with dirt, so that nothing can escape from it, which may be the cause of the stoppage. The sink, in common with the other sinks or so-called earth-closets, is in the usual filthy condition, and the ground at the rear of them strewn with filth dropped from the boxes when emptied, filling the air with foul odors. The urine escapes from the pipes leading from the sink of B Company, and runs on the surface for quite a distance. The drain leading from the kitchen sink of H Company is stopped; an ineffectual attempt has been made to open it; the slop now escapes from the holes made, and spreads out on the surface, thus adding to the unhealthy condition of the post.

On the 31st of August last there were two cases of typhoid fever under treatment at the post hospital; during the month of September seven additional cases have been under treatment; of these, six cases were transferred from Camp Murray, two of whom were complaining when the command left the post, but were not on the sick report until a few days later. As the period for incubation of this disease averages about twenty-one days, it is fair to presume that these cases originated at this post, where the conditions necessary to cause it obtain. Of the nine cases treated, one was complicated with pneumonia, and terminated fatally; three have been returned to duty, three are convalescent, and two are in a fair way to recovery. The prevalence of typhoid fever is a sufficient commentary on the imperfect sanitary arrangements of the post. I would respectfully recommend that the guard-house be cleaned thoroughly, the inside walls whitewashed, the urinals put in order, the walls and floor behind and under the benches on the porch cleaned of the tobacco juice that has been ejected on them, the grounds policed, the drain pipes (spoken of above) repaired, and the permanent improvements in regard to the substitution of water closets for the so-called dry-earth closets, and the ventilation of traps, as recommended at various times during the past two years, be carried out; in short, that the post be put in a perfect sanitary condition.

No. 2.—*A report on acuity of vision in United States troops, as shown upon the target range. By Assistant Surgeon Louis A. La Garde, U. S. Army, Fort Ellis, Montana Territory.*

The subject of target-shooting has developed some facts at this post that must have, with few exceptions, otherwise remained latent. Shooting is one of the most important functions of the soldier, and any defect in his physical being that interferes with his capability in this regard impairs his efficiency as a soldier. Impaired vision is one of the most frequent of these defects; and it is with this, or rather the acuity of vision in soldiers, that I wish to deal in this report. The systems of carbine and rifle practice by which soldiers were formerly governed, and particularly that part of the system devoted to the method of scoring, permitted fraud in many cases, and the practice of false scoring had become so prevalent that soldiers had commenced to call it "shooting with a lead pencil." It was then a hard matter to tell who were the poorer shots, because nearly every man in the Army was rewarded with his target buttons. The present regulations on the subject, in Captain Blunt's Manual, restrict the chances for fraud to a minimum, and the consequence is that the poor shots, notably from defective eyesight, are soon detected. The result of my inquiry on this subject, as detailed below, although in a limited field, offers suggestions to the recruiting officer that are most evident:

Case No. 1.—Lieutenant B— has had imperfect vision for objects at a distance since childhood. On the target range the bull's-eye at 500 and 600 yards is blurred, especially when he looks at it for any length of time. His left eye can distinguish objects better than his right, and for that reason he has been shooting for the last year from the left shoulder. With Snellins test-card, R. eye = 20-40; L. eye = 20-30. A —48 lens brings vision to 20-20 in the right eye, and he now shoots with the —48 glass from the right shoulder, and his record is improving every day.

Case No. 2.—Private C. C. Cleary, Troop E, First Cavalry, was sent by his troop commander. He is one of the poorest shots in the troop. V = 20-30; A + 36 lens brings vision to 20-20. He can readily count black spots on a card at 20 feet, as required by existing regulations in the examination of recruits. On the target range he can tell readily when a white disk is placed before the bull's-eye and when it is removed at 600 yards. He states that the glare of the sunlight and constant looking at the target blurs his sight very much.

Case No. 3.—Private Anthony Haney, Company C, Third Infantry, was sent by his company commander. V = 20-50. A —48 lens brings both eyes to 20-20. Fails to count spots on cards at 20 feet, and he can not tell me when the white disc is before the bull's-eye at 600 yards.

Case No. 4.—Private Richard Heartery, Troop E, First Cavalry, was sent by his troop commander. He is one of the worst shots in the troop. V = 20-40. Vision not improved by minus or plus glasses. When examined with Green's chart of thirty radii, he can see but five of the vertical lines clearly; the horizontal lines are fringed, white,

&c. He can readily count spots on cards, and he can tell me when the bull's-eye at 600 yards is obscured or not by a white disc. He makes the same complaint as cases 1 and 2, about blurring when his vision is fixed on the target for any length of time. In case No. 3, we find a man who was probably enlisted contrary to the specific directions in Par. 1, G. O., No. 82, Headquarters of the Army, A. G. O., Washington, D. C., August 13, 1879. He states that he did not count the spots readily on the card at the time of enlistment, but that the doctor told him "he would grow out of his trouble." Although cases 2 and 4 come to the standard in accordance with the above-quoted order, the fact nevertheless remains that they are poor shots, and the presumption is that their shooting could be improved by glasses. Case No. 1 illustrates this point thoroughly. This officer made fruitless endeavors from the right shoulder, and never succeeded till the slight error had been corrected by glasses.

Case No. 5.—Private Louis Schwerin, Company E, Third Infantry, has astigmatism to a high degree in both eyes. $V=20-50$. He counts the spots on the test-cards at 20 feet, but he is unable to see the bull's-eye at 600 yards. He is, as was first noted by his company officers, unable to see the different colored discs employed to indicate the scoring.

Case No. 6.—Corpl. W. P. Hildebrande, Company E, Third Infantry, has a lenticular cataract clouding one-fourth the lens of both eyes. $V=20-50$. Can count spots on test cards readily at 20 feet. Cannot see bull's-eye at 600 yards. His failures at this range were entirely similar to those of case No. 5; they were examined together.

Case No. 7.—John Joseph, musician, Company C, Third Infantry. Astigmatism both eyes. $V=20-40$. Can count spots on cards readily at 20 feet, and fails at the 600 yards, as did 5 and 6.

One would infer from Par. 1, G. O., No. 82, of 1879, above quoted, that if a recruit can see and count the small spots on the cards at 20 feet his vision should be good enough to permit him to see distinctly the bull's-eye of the 600-yards target at the latter distance; but the inference is misleading. Cases 5, 6, and 7 all go to prove this. In view of these facts is it proper to still examine recruits in accordance with this order? I could not presume to offer a better method; but I must state that, in all my examinations, I observed that if a soldier's vision was 20-20 he never failed to see the bull's-eye at any distance. I beg leave to state that this subject was thrust on me by the company commanders, who first suspected the acuity of vision in their men. When I tell them what I have found they argue that men so incapacitated should not count against their figure of merit, and accordingly I have borne them "sick in quarters capable of all duty except target shooting" on the company sick books. In conclusion, I would like to call attention to one more case.

Case No. 8.—Captain M—— has reached the age of fifty years, when the near point begins to recede on account of loss of accommodation. For this reason he cannot see the rear sight of his gun without glasses (+24), and when he uses the glasses to aim vision is dimmed for the front sight and bull's-eye. The difficulty in his case is entirely overcome by the use of an opaque disk in the frame of a pair of spectacles, having a small hole in the center which controls the amount of light admitted through the sluggish pupil; being to the eye what a diaphragm is to the objective of a microscope. Par. 176, of Blunt's Carbine and Rifle Practice, prohibits the use of orthoptic eye-pieces, &c. The question having been put to the author by letter, he answers that an opaque disk, as described, is an orthoptic eye-piece, and that it cannot be permitted in regular practice, because it limits the field of vision too much. I consider this decision unfortunate, because among presbyopes in the line the majority are officers of the army, and, as a rule, they are men of great experience. If they were allowed to use the disk in regular practice their shooting could be very much improved, and they would necessarily take more interest in the important subject of target-shooting.

No. 3.—*Preliminary report on certain peculiar pathological appearances in Texas fever in cattle.* By Assist. Surg. Richard C. Newton, U. S. Army, Fort Elliott, Tex.

On the 20th of September, 1885, the writer, accompanied and assisted by Mr. E. J. Rising, of Mobeetie, Tex., and a negro named Andy —, made partial autopsies on two well grown, graded calves (heifers) about six months old, which had died of Texas fever. The exact time and method of exposure to the disease was not ascertained; but it was known that the animals had mingled with cattle from a part of the State south of this point.

Calf No. 1.—Had been dead two or three hours. The head was rigidly flexed upon the neck, and head and neck were thrown well backward. Legs were rigidly extended. The viscera were still very warm, even communicating an unpleasant sense of heat to the hand. Only the thoracic and abdominal cavities were examined. The heart was filled with dark clots, so that the cavities were widely distended. Pulsations had ceased in diastole. The lungs, spleen, liver, and kidneys were extremely congested. These organs

resembled those of a person who has died in the acute stage of a high fever. There were the white patches upon the surface and scattered through the substance of the liver ascribed to acute fatty degeneration. The manifold was filled with hard, dry, partly digested food, which looked as though it had been baked. The spleen was probably enlarged. About eight worm-like bodies, resembling somewhat a seat worm in appearance, of about the same length, although wider and flatter, were picked off the capsule (outer covering), of the spleen. They were lodged on the splenic capsule where this impinges upon the stomach, and seemed imbedded in the capsule, which was, I should judge, thicker than normal. These little bodies were semi-transparent and were not readily seen until the spleen was detached from the body and held up to the light. They possessed some power of motion; Mr. Rising, Andy, and the writer distinctly saw them move (a sort of wiggling motion). We assumed that they were alive. The bladder was empty.

Autopsy No. 2.—Another calf, of similar age and description, belonging to the same herd, had been opened several hours before. After a careful search, we found upon the capsule of the spleen one of the worm-like bodies described above. The spleen was apparently not greatly enlarged. Except that we found only one of the worm-like bodies in the second case, the two autopsies gave similar results to gross appearances.

September 29, 1885, Mr. Rising and the writer went 15 miles to the ranch of Mr. J. E. Jones, and found a fine three-year-old bull (three-quarters Durham) dead of the fever. This was one of fourteen cattle that Mr. Jones lost from the disease. The animal had been dead twelve hours. Its head was thrown back, and limbs rigid as in our former cases. Apropos of this appearance, the old negro who assisted us at the former autopsies assures me that the victims of Texas fever always die like a person in the spasms of spinal meningitis. The brain and cord of this animal were removed in part. Brain was somewhat congested, but was for the most part, to gross appearances, normal. The meninges were congested and contained small bodies which resembled tubercles in man. The spinal cord was diffluent and ran down of its own weight when the meninges were removed. The latter were deeply congested, and also contained the small tubercular-like bodies found in the cerebral meninges. The cord substance was, except at the medulla, if anything abnormally white in color, and was in places of about the consistence of thick cream. The substance of the medulla was congested along the floor of the fourth ventricle. The heart and lungs were much as described in the calves. The spleen was enormous—29 inches in length, and weighed 7 pounds. One of the little worm-like bodies was found in this case on the exterior of the spleen, as in the former cases. The manifold was filled with firm cakes of partly digested food, about as thick as a shingle, hard and dry. The bladder was full of bloody urine. The kidneys were much congested, dark colored, and were breaking down, in fact, almost gangrenous, at the more dependent portions. It should have been mentioned before that several areas of local effusion were observed in the sub-cutaneous cellular tissue when we were stripping off the hide; one especially on the back at the lumbar region was probably a foot by a foot and half square, and an inch or more deep, and contained bloody serum partly coagulated. The worm-like body was put under the microscope and appeared to be jointed, not unlike the tænia. I could not make out a head and tail very well. After an hour's exposure to the atmosphere, this body from being translucent became nearly a dead white. Other peculiar properties were noticed in these bodies. I had carried the six or eight obtained from the first case about in my pocket in a little glass vial for several days, when I observed them breaking down and dissolving into a thick liquid, which, under the microscope, was apparently a collection of thousands of little circular bodies. After putting them in a cool place, this degeneration ceased. One of them has been preserved, apparently without alteration, for over two months dried on a glass slide without cover. It looks like a speck of varnish or shellac on the glass.

By the kindness of the post butcher, Mr. J. J. Joyce, I have been able to examine several spleens ("melts") from healthy beeves, just slaughtered, and have not discovered any body or bodies, similar to these under discussion, adhering to the spleens. Nor have I been able to discover any mention of such phenomena in the very limited literature upon this subject accessible to me. I have, however, consulted the report of Professor Gamgee and others made to Congress in 1871 on the subject of Texas fever in cattle. I regret extremely that my opportunities for studying this interesting malady have been so limited. The last autopsy, that upon the bull, was the only one that was at all thoroughly made. I have been alone in this post, so far as an assistant goes, since April, and have only succeeded in seeing the three autopsies mentioned. The fever has been mild in this section this year. In great part this is owing to the repressive measures of the Panhandle Stock Association in keeping, as far as possible, all cattle from Southern and Middle Texas out of our country. There is always some Texas fever, I believe, and I trust that it may be thoroughly studied and the result made public.

What the pathological significance of the little bodies I have discovered may be it would be hard to say without considerable more investigation. These may have been

accurately described long ago and their significance determined. I am working, in a measure, in the dark. I wrote to Dr. Salmon, of the Animal Industry Bureau, for information, but have, as yet, received no reply. It seems to me that Fort Elliott offers some peculiarly good opportunities for this study, since it is just in the border country. The fever does not originate here, nor does it remain with us long after frost. One very early frost this year (8th of October) evidently had a most beneficial effect in stopping the ravages of the fever. Whatever may be known relative to the etiology and pathology of this scourge by scientific men, cattle breeders know next to nothing about these questions. Were they settled, and an efficient means of prevention adopted, millions of dollars' worth of property would be annually saved, and the general prosperity of our country enhanced by that much. It was our intention to slaughter, if possible, one or more animals hopelessly sick of the fever with the especial view of looking for the little bodies on the spleen, since the number and liveliness of these peculiar organisms was apparently in the inverse ratio to the length of time since the death of their host. However, owing to the scarcity of cases in our neighborhood, and other causes, no opportunity presented itself, although various cattle owners promised us permission to slaughter their cattle; so anxious are all to fathom the mystery that surrounds Texas cattle fever. Another season may afford greater facilities.

No. 4.—*Report of five cases of gunshot wounds treated antiseptically: Result, recovery.* By Surg. C. H. Alden, U. S. Army, Fort Snelling, Minn.

Case No. 1.—Gunshot flesh wound of left shoulder. Richard Hutson, private, Company F, Twenty-fifth Infantry; negro; age 28; admitted December 4, 1884. Wounded accidentally on day of admission in a bar-room near post. Ball from pistol, caliber not known, probably about .36-inch, entered in front and just above external end of left clavicle. It lodged in tissues behind, probably, though exact location was not ascertained, as wound was not probed. No shock. Hemorrhage slight. Wound was washed with solution corrosive sublimate, 1-1,000, iodoform dusted on, then sublimated cotton, carbolated gauze, and sublimated bandage applied, the arm confined to thorax by bandage, and patient put in bed. There was no elevation of temperature. There was at first slight oozing of bloody serum, but no suppuration at any time. Wound redressed once, and was found entirely healed when dressings were finally removed, January 10, 1885. Returned to duty, cure complete, January 19, 1885.

Case No. 2.—Gunshot flesh wound of head. Joseph Sherley, private, Company B, Twenty-fifth Infantry; negro; age 27; admitted July 21, 1885. While standing in pit below target affixing pasters to lower part of revolving frame, was accidentally struck by a rifle ball, U. S. calibre, .45-inch, in the head. He is a tall man, over 6 feet, and the edge of bank in front of pit had been worn away. The missile glanced upon the frontal bone, from the left frontal eminence upward and toward median line, inflicting a ragged flesh wound about 2½ inches long, without apparent injury to the underlying bone. There was pretty free hemorrhage, which ceased spontaneously. The wound was dressed antiseptically, as in case No. 1. It was redressed in same manner on July 27. There had been slight sanious discharge, but no suppuration. There was no rise of temperature. On July 30 the wound was found entirely healed, but he complained of occasional dizziness and slight pain in head in vicinity of wound, especially on exposure to the sun. In September there was an attack of diarrhea, lasting some days, which apparently had no connection with injury. About the middle of September there was slight pouiting and sanious discharge from upper angle of wound.

September 28, a small incision was made at this point, evacuating a piece of hair which had become occluded in the wound and a few drops of pus. The wound then closed. Sherley continued to complain of persistent but not severe headache and dizziness when stooping or exerting himself, and his face wore a somewhat anxious scowling expression. Ophthalmoscopic examination showed both eye grounds hyperæmic. The cicatrix was sound, not tender and not adherent, and the periosteum and bone beneath seemed unaffected. The symptoms could be explained perhaps by supposing that a chronic localized inflammatory process had been set up in the meninges, beneath the wound, through the vessels of the diploe. Yet it is probable that Sherley much exaggerated his symptoms. He had been recently enlisted and was evidently (and naturally, perhaps) disgusted with the service, and anxious to be discharged. Revulsives, counter-irritation, and sedatives were used, but with no permanent good effect. Operative interference was not thought sufficiently clearly indicated. It certainly would not have been submitted to if advised. He was returned to duty for a few days in November, the weather being cool, but he would not try to do anything. As there was evidently no prospect of making an effective soldier of him, he was finally discharged for disability November 14, 1885.

Case No. 3.—Gunshot flesh wound of thigh. Mrs. N——, mulatto, age 25, wife of sergeant in Twenty-fifth Infantry band, shot herself in the left thigh, accidentally, while play-

ing with a pistol, October 4, 1885. The ball, conical, caliber .22, entered about middle of anterior surface of left thigh, passed downwards and inwards, quite superficially under integument for about 6 inches, and emerged on inner aspect of thigh. There was but slight hemorrhage. Antiseptic dressings, as in the previous cases, were applied and rest enjoined. On October 10, the sixth day from reception of injury, the dressings were removed and the wound found entirely healed. There had been no discharge.

Case No. 4.—Severe gunshot flesh wound of shoulder. Otto Curtis, private, Company C, Twenty-fifth Infantry; mulatto; age 22; admitted October 6, 1885. On day of admission, while laboring under an attack of melancholia, of which he had already shown slight symptoms, he attempted suicide by shooting himself with his rifle, U. S. caliber .45. It seems that he sat on the edge of his bunk and pushed off the trigger with a short stick. He evidently intended to shoot himself in the left breast, but the barrel slipped in act of firing, and the ball entered 3 inches below left coracoid process, and emerged about 3 inches below acromion, the arm and shoulder being raised. The track of the missile was about 3 inches long. The skin around wound of entrance was much burned. There was moderate hemorrhage, which ceased spontaneously. Antiseptic dressings were applied as in the cases already referred to, and the arm put in a sling and confined to the thorax. Owing to the free discharge of bloody serum, the dressings were renewed on the 8th. They were not again disturbed until the 17th, when the dressings were found to contain a large amount of blood-stained gelatinous material, chiefly from the burned surface. This discharge was not purulent, and was odorless. Antiseptic dressings were again applied, renewed on the 25th, and changed for carbolated cerate dressings. November 1, the discharge becoming thinner, lighter in color, and gradually less in quantity. Having shown renewed symptoms of melancholia, Curtis was, on November 8, 1885, sent to the Government Hospital for the Insane, at Washington. The posterior wound had then healed. The anterior wound had nearly closed, and there was some semi-purulent discharge from the superficial ulcers left by the burns. Curtis was a recruit, having enlisted in July, 1885. He was tall, thin, and immature. He said his true age was seventeen years.

Case No. 5.—Gunshot flesh wound right leg. Sergt. Jerry Banham, Company C, Twenty-fifth Infantry; age 36; mulatto; admitted January 1, 1886, having on that day, while somewhat intoxicated, shot himself accidentally in calf of right leg. The ball, conical, caliber .22, entered about middle of calf, its further course not being determined, as no probe was used. There was but little hemorrhage. Wound was at once dressed antiseptically, and leg elevated and kept at rest. On January 7, when the dressings were removed, a little dried blood was found upon them, and the wound was dry and occluded with iodoform; no redness or swelling in the vicinity. Antiseptic dressings renewed. Returned to duty, wound healed, January 25, 1886.

No. 5.—*Report of a case of repeated rupture of the membrana tympani by discharges of artillery, with concussion of the auditory nerves and total deafness: Result, discharge from service.* By Surg. C. H. Alden, U. S. Army, Fort Snelling, Minn.

John Kerston, private, Light Battery F, Fourth Artillery, age 24, Belgian, enlisted September 10, 1884. First admitted July 13, 1885. In the spring of 1885 was under treatment for large and painful boils on the face, but no impaired hearing was then noted. The man's history is unsatisfactory, owing to his want of intelligence, but he gave me no account of previous ear or throat disease. He was with battery in camp at Faribault, Minn., in June, 1885, and about the end of the month while salute was being fired he became suddenly deaf in left ear. Hearing was regained in a few hours to such an extent that he remained on duty. There was no medical officer with the command. On July 6, a few days after return with battery to the post, he felt some pain in the ear and noticed a slight discharge. Did not present himself to surgeon until July 13, day of admission. At this date there was a small amount of sero-purulent discharge, and examination of left ear showed a linear fissure somewhat gaping, in lower anterior segment of membrane, extending from umbo to circumference. Membranes of both ears were darker and duller and more uneven than normal. No air could be ascertained with certainty to pass through either Eustachian tube. There was little, almost no, pharyngitis. Hearing to conversation slightly impaired in right ear; in left it was diminished to 4 feet. Some tinnitus was complained of. The fissure in left ear was evidently healing and under no treatment but cleanliness it closed entirely by the 17th of July. He was returned to duty July 28, hearing in left ear being improved somewhat (conversation 6 feet). The attention of the battery commander was directed to the man's condition, and orders were given that he should not be placed near the piece when it was being discharged. There was thereafter frequent battery practice, but no further difficulty was experienced by the man until October 15.

During a drill for the department inspector on that day Kersten was inadvertently stationed near the muzzle of one of the pieces, and immediately after its discharge fell

with a loud cry of pain. Upon being picked up he was found to be entirely deaf in both ears, and severe pain in the head was complained of. On his admission to hospital the same day the tympanic membranes of both ears were found to be ruptured in the lower anterior segment. The rents extended from the umbo to the circumference, that in right ear but slightly gaping, that in left comprising about a sixth of the area of the membrane. There was no discharge from either opening. He was totally deaf to conversation and watch, and to tuning-fork held against head. Said that tuning-fork placed against teeth "moved them." It was evidently felt, but not heard. Complained of some pain in occipital region.

October 20.—A whitish substance was found in the fissures, but no discharge into meatus. Pain had now entirely ceased. November 1 the fissure in right membrana tympani had closed, and November 21 that in the left had healed also, but there was no improvement in hearing. Both membranes on inspection seemed dull, irregular and sunken, and the Eustachian tubes, as before, to be impervious. He was carefully watched, and every device that suggested itself to test his ability to hear was tried, but always with a negative result. Finally, on November 23, he was etherized, but no evidence that he could hear at all was elicited. He was discharged for disability November 29, 1885.

Otolologists seem to agree in stating, contrary to what might be expected, that rupture of the membrana tympani by explosion of artillery is rare. It is stated in the Medical and Surgical History of the Rebellion, 1st Surgical Volume, page 385, that "rupture of the membrane of the tympanium from propinquity to artillery fire was frequent," but no figures are given. The foregoing case is of interest from the recurrence of the accident. It seems highly probable that there had been in this case a subacute inflammation of both middle ears, but slightly injuring the hearing power, but sufficient to impair the patency of the Eustachian tubes and rendering the membranes less elastic. It may have had its origin in a pharyngitis which had itself almost disappeared. At the time of the last rupture there must have been also concussion of both auditory nerves so violent as to destroy their function. The unfortunate issue of the case emphasizes the entire unfitness of men with occluded Eustachian tubes and impaired membranes for the artillery service.

No. 6.—*Report of a case of gunshot wound, followed by amputation of the foot at the ankle joint. Use of Esmarch's tourniquet followed by profuse capillary oozing. Use of mercuric chloride and iodoform. By Assistant Surgeon H. G. Burton, United States Army, Fort Assiniboine, Montana Territory.*

Military convict John T. Garrigan, while at work in the post garden, April 18, 1885, by some means, obtained the sentinel's rifle and shot himself through the left foot. The missile was an elongated ball, calibre .45, from a Springfield rifle, which was held close to the foot when fired. Patient was seen about half an hour after the occurrence of the accident. Shock was not great. Pulse good. Hemorrhage was rather profuse from the plantar arch. The wound was probed with the finger, after being disinfected in 1 to 1,000 solution of bi-chloride of mercury. All the bones of the tarsus, except the os calcis, were found to be greatly comminuted; also the heads of the first and second metatarsal bones. The soft parts were greatly lacerated and powder burned. It was ascertained that the bullet had entered the foot on the outer side of the instep, close to the ankle joint, contusing the head of the astragalus; glancing from thence, it tore through the foot, passing out at the base of the great toe. A primary dressing consisting of a compress of marine lint, soaked in 1 to 1,000 solution bi-chloride was used to restrain hemorrhage. It was considered that amputation of the foot was necessary, and accordingly it was disarticulated at the ankle joint. The operation was begun at 10 a. m., and the last suture introduced at 12:5 p. m. Anæsthetics employed, stronger ether. Quantity used to induce insensibility, five fluid ounces. Time required, thirty minutes. Total quantity used, thirteen fluid ounces. Time anæsthesia was maintained, one hundred minutes. Slight vomiting during insensibility. No excitement, no prostration. Anæsthetic administered by means of a cone-folded towel. Irrigation with 1 to 1,000 solution of bi-chloride was kept during the operation. The bloodless method was used. The ligatures used were iron-dyed silk.

A large number were employed, as every little vessel required one; the exact number was not noted. There were thirteen sutures, also of iron-dyed silk, used. After the removal of the Esmarch's tourniquet there was profuse capillary oozing, which was, with difficulty, controlled by the application of towels wrung out of hot antiseptic solution. Iodoform was dusted over the wound, and it was then dressed with antiseptic gauze and absorbent cotton. One drainage-tube was left in the wound. No shock followed the operation. Patient slept well that night, but next morning it was found that there had been considerable oozing, enough to show through the outer dressing. The temperature was 101°, and the dressings were removed. The stump was found to be

hot, and towels wrung out in ice-cold solution of bi-chloride 1 to 1,000 were applied. The temperature reached 102°, and continued there for two days, after which it returned to normal, and has remained so until now. Six days after the operation, on the 24th, all the sutures were removed, and nearly the whole length of the incision was united. There is still a slight discharge from the drainage-tube, but the stump looks well, and the general condition is excellent. The iron-dyed silk sutures did not cause the slightest irritation, and were sweet and clean when removed.

No. 7.—*Report of the treatment of several cases of diphtheria by the use of the mercuric chloride, both internally and by spray. Also, of experiments made in the solution of the pseudo-membrane of that disease. By Hospital Steward Bernard Persh, United States Army—service of Acting Assistant Surgeon Benjamin Pennebaker, United States Army—Frankford Arsenal, Pennsylvania.*

During the months of August and September, 1884, a number of cases of diphtheria occurring amongst children of soldiers stationed at this post were treated in this hospital. The opportunities for observing these cases were unusually good, and I have written out the notes which I made at the time, believing that they will prove interesting.

The cases occurred in a building known as the "farm-house." The first case appeared in the family of a private, who occupied a kitchen 14 by 14 by 8 feet, and a bedroom of the same dimensions, in the building. The family consisted of four children, husband and wife. The kitchen, which was also used as the living room, communicated with a damp and not very clean cellar. It had been raining for a week or ten days previous to the appearance of the first case, and the floor of the cellar was saturated with moisture and a puddle of water was found in one place. Owing to the inclemency of the weather the children had been unable to leave the house, and they were in the habit of playing in the cellar. There was no drainage to the building. A privy, consisting of eight earth-closets, clean and in good working order, was situated 20 yards from the building. The water was furnished by a pump about 30 yards from the house and privy. No communication between the privy and pump seemed to exist, and the water was, and is, remarkably free from organic matter.

There seems to be fair grounds for the belief that the first case of diphtheria originated at this post. There was no diphtheria in this neighborhood at the time the disease made its appearance at the arsenal, and the sanitary condition of the building was such as to favor the development of the disease. Cases of diphtheria had appeared in this building before, but not within ten months prior to the appearance of the cases under consideration, and most of the sickness at the post occurred amongst families living in this house. The building has since been removed, and the belief that its unsanitary condition was the cause of the disease is strengthened by the fact that, since the house was vacated, no additional cases have occurred here, although numerous cases of diphtheria have appeared in this vicinity during the past three or four months.

As soon as the disease was recognized in the first case the little patient was transferred to the post hospital for treatment; but the disease had already spread to two other children of the same family, who were taken sick two days after. These three children were kept in the hospital for about two weeks, and no further cases occurred at this post until five days after their discharge from hospital, when another case appeared in a family living in the same house, and two days thereafter another case appeared in this building. Eight days after the children were discharged from hospital their mother exhibited signs of diphtheria.

The last three cases which thus occurred within a week after the first three cases had been discharged from hospital, and after an interval of nearly three weeks after the appearance of the first case, were possibly contracted from the children who had undergone hospital treatment. I may add, however, that all possible precautions were taken to prevent these children from carrying the disease back to their home, and if the germs of the disease were carried from the hospital to the "farm-house" it was perhaps the unsanitary condition of the dwelling which made the development or propagation of the disease possible. This proposition is perhaps confirmed by the fact that the disease was confined entirely to the inmates of that building. Five of these cases were treated in the hospital in a ward called the "isolated ward," but this designation is not an indication of its situation, since, in fact, no isolation between this ward, which is now being converted into a general ward, and the hospital building exists. In this building, used for hospital purposes, lived at that time my wife and two children, and for part of the time two women and three children, one of the women being confined during her stay in the hospital and while cases were at their full height. The patients were nursed by three men, fathers of the children, and these men were confined for two weeks to the room in which the children were sick, did not leave it at any time, and without either of them exhibiting any signs of disease.

It was with grave apprehensions for the safety of my family that I saw these patients admitted to the hospital; more so, since the peculiar arrangements made it necessary for me to have the food of these patients cooked with that of my family, to carry the meals into the ward, and, in fact, perform the duties of a nurse, since the men sent to take care of the children were naturally ignorant of the work they were expected to do. My fears were increased when a pregnant woman, near her confinement, and her two children were ordered to take quarters in the hospital, the third child of this woman having been admitted a few days previously with diphtheria. The nature of my duties required my presence in the room where these cases were treated almost every hour, and since this room communicated almost directly with my quarters and the rooms occupied by the other people then living in the hospital, there was great danger of communicating the disease. None of the women, children, or the men, who were in constant communication with these cases while under hospital treatment, showed any signs of diphtheria; but as soon as some of these cases were returned from the hospital to their home, in which they had contracted the disease, new cases again made their appearance. The theory advanced by Professor H. C. Wood and Dr. Formad, of the University of Pennsylvania, that "certain circumstances, outside of the human body, are capable of throwing the common micrococcus into a condition of active growth and engendering an epidemic of diphtheria," seems to be confirmed by the above illustrations. In the hospital where the patients were brought in contact with others, either directly or indirectly, no new cases occurred; possibly for the reason that the conditions to change the ordinary micrococci of the throat from the passive to the active state did not exist, while in the building which furnished the cases, favorable conditions for the development of the micrococci or bacilli prevailed. This theory has been further supported by the extensive researches of Löffler, who found in the buccal mucus of a healthy child bacilli, which were cultivated to the fourth or fifth generation. These cultures, although originally obtained from a healthy subject, when inoculated under the skin of guinea pigs, produced all the symptoms of diphtheria. In this connection, it is of peculiar interest to note that the first case which occurred at this post presented in its earlier stage nothing but a simple sore throat, "but the ordinary micrococci (or bacilli) in the throat and mouth, favored by special conditions, was gradually changed from the dormant to the active state, and a self-generated diphtheria was formed."

The following is the clinical history of the cases:

Case 1.—Harry Patburg, age seven, was first seen on August 5, 1884. Complaints of sore throat. Upon examination, found slight ulceration of both tonsils, tongue clean, no fever, no pain, excepting slight difficulty in swallowing. Diagnosis: Acute angina tonsillaris.

August 6. Did not see patient, but the attending surgeon states that there is no change. The following medicine, ordered yesterday, was continued to-day: Tincture ferri chloridi, two drachms, ammonii chloridi, one and a half drachms, sirup tolu, four ounces; teaspoonful every two hours. Some of the urine being sent to me, upon my request, examined same for albumen with negative result.

August 7. Admitted to hospital. Both tonsils present pseudo-membraneous exudations, breath offensive, salivation, tongue coated. Continued treatment. No albumen. Morning—temperature 100.2°, pulse 104, respiration 28; evening—temperature 101.8°, pulse 108, respiration 28.

August 8. Marked pallor, both tonsils covered by false membrane, discharge from both nostrils, indication of formation of membrane in posterior nares, profuse salivation. Suggested administration of mercuric chloride in small and frequent doses in the following form: Hydrarg chloridi corrosive, one grain, ammonii chloridi, two and a half drachms, tinct. ferri chloridi, three fluid drachms, in sufficient water to make five ounces; take a teaspoonful, in water, every two hours. Injected solution of mercuric chloride (1:2000) into both nostrils every three hours. No albumen. Morning—temperature 99.6°, pulse 104, respiration 28; evening—temperature 101.4°, pulse 104, respiration 24.

August 9. Both tonsils and velum covered by membrane; nasal discharge profuse, but less offensive. Continued treatment. No albumen. Morning—temperature 99°, pulse 104, respiration 28; evening—temperature 101.6°, pulse 104, respiration 24.

August 10. Membrane disappeared from velum-palati, but covers both tonsils and pillars: nasal discharge much less. Picric acid shows albumen this morning; nitric acid indicates proteid in the evening. Morning—temperature 100.4°, pulse 104, respiration 28; evening—temperature 98.4°, pulse 100, respiration 24.

August 11. Took nourishment freely since admission, except this morning. Refuses to take food and medicine. Tonsils and pillars covered by membrane; palate free, but swollen and red; albumen much increased. Continued treatment. Morning—temperature 99.6°, pulse 100, respiration 28; evening—temperature 98.4°, pulse 96, respiration 28.

August 12. Better. Left tonsil clear of membrane, but swollen, soft palate less injected, nasal discharge almost disappeared, albumen diminished. Continued treatment.

Morning—temperature 98°, pulse 100, respiration 28; evening—99.8°, pulse 100, respiration 28.

August 13. Small patch of pseudo-membrane on right tonsil, redness of left tonsil and slight general faucal inflammation, albumen in small quantities, nasal discharge has ceased. Discontinued injections; continued other treatment. Morning—temperature 98.8°, pulse 96, respiration 24; evening—temperature 98.4°, pulse 80, respiration 24.

August 14. Improving. Membrane disappeared, appearance of left tonsil and soft palate almost normal, urine albuminous. Continued treatment. Morning—temperature 98°, pulse 88, respiration 26; evening—temperature 98°, pulse 76, respiration 24.

August 15. Discontinued mercury; ordered four drops of tinct. ferri chloridi every four hours. Albumen present. Morning—temperature 97.8°, pulse 84; respiration 20; evening—temperature 98.4°, pulse 84, respiration 20.

August 18. Patient discharged from hospital. Urine continues albuminous. Continued iron.

August 22. Have seen patient daily since he left hospital; looks well. Picric acid indicates presence of albumen; nitric acid gives negative results.

September 20. Parents having removed from post, did not see child until to-day. He looks pale and poorly nourished. Presents partial paralysis of right leg and nictitation of right eyelid. According to statement of mother, affection of orbicularis muscle has existed for about two weeks. Mother thinks that the child had an attack of croup last night. Upon examining throat, found parts in healthy condition, but noticed palate inclined to right side. Voice of a nasal character. Ordered nourishing diet and iron, quinine and strychnine. Examined urine for albumen, with negative results.

September 30. A remarkable improvement has taken place in boy's general health. Spasms of orbicularis muscle have disappeared, speech normal, position of palate perpendicular; walk normal, excepting slight dragging motion of right leg. Continued tonic.

October 8. Boy came to office to-day; looks well, no signs of disease. Discontinued treatment.

December 1. Saw boy to-day; appears to be in perfect health.

Case 2.—William Patburg, age ten, complained of being sick on the morning of August 8, 1884, the day after his brother was admitted to the hospital with diphtheria. Upon examination, found both tonsils red and swollen, and a line of false membrane was noticed on lower posterior aspect of right tonsil. Tongue coated, breath offensive, bowels and urine normal. Mother thinks he had a chill during the night. Sent to hospital and ordered same treatment as in Case 1. Morning—temperature 101.8°, pulse 104, respiration 28; evening—temperature 102°, pulse 104, respiration 28.

August 9. Both tonsils covered with membrane, salivation, breath very offensive, free discharge from both nostrils, urine normal. Injected solution of mercuric chloride (1:2000) into nostrils every three hours. Continued other treatment. Morning—temperature 100.8°, pulse 108, respiration 28; evening—temperature 101.6°, pulse 100, respiration 26.

August 10. Tonsils completely covered by false membrane. Soft palate shows exudate. Discharge from nose continues, but character of secretion is less offensive; spits a great deal, but no indication of mercurial salivation. Continued treatment. No albumen. Morning—temperature 100.8°, pulse 108, respiration 28; evening—temperature 100.8°, pulse 104, respiration 28.

August 11. Seems to have difficulty in breathing and talking. Sub-maxillary glands swollen, no albumen, less nasal discharge. Continued treatment. Morning—temperature 99.6°, pulse 100, respiration 28; evening—temperature 101.6°, pulse 100, respiration 28.

August 12. Voice almost absent, croupy cough, indication of exudation extending downwards into larynx. Albumen with picric acid, negative with nitric. Inhalations of an ounce lime-water every two hours. Continued other treatment. Morning—temperature 99.4°, pulse 100, respiration 32; evening—temperature 102.4°, pulse 104, respiration 36.

August 13. Membrane disappeared from left tonsil, albumen increasing, other symptoms continued about the same. Continued treatment. Morning—temperature 99.6°, pulse 100, respiration 32; evening—temperature 100.4°, pulse 100, respiration 28.

August 14. Speaks clearer this morning, membrane entirely disappeared from tonsils and soft palate, leaving parts somewhat swollen, glands less enlarged, nasal discharge diminishing, albumen increasing. Discontinued inhalations of lime-water. Continued other treatment. Morning—temperature 98.4°, pulse 88, respiration 24; evening—temperature 99.4°, pulse 92, respiration 28.

August 15. Better. Voice a little hoarse, less swelling of glands and tonsils, epistaxis during the night, nasal discharge ceased. Discontinued nasal injection. Reduced mercuric chloride to eight doses in twenty-four hours. Less albumen. Morning—tem-

perature 98.4°, pulse 92, respiration 26; evening—temperature 99.4°, pulse 88, respiration 24.

August 16. Voice good, appearance of throat normal, slight tenderness and swelling of glands of left side of neck. Discontinued mercury. Ordered five drops tinct. ferri chloridi every four hours. Urine albuminous. Morning—temperature 98°, pulse 88, respiration 24; evening—temperature 98.4°, pulse 84, respiration 24.

August 17. Failed to find albumen with nitric acid; picric acid and other sensitive tests indicated albumen; other signs of disease absent. Continued iron.

August 18. Traces of albumen still present. Sent to his home, with directions to continue iron.

September 1. Have examined urine of this patient daily since his discharge from hospital and was able to demonstrate presence of albumen in small quantities until to-day, when it was absent.

September 5. Albumen has not returned, and boy seems in excellent condition.

December 1. Boy has enjoyed good health since last report.

Case 3.—Fred Patburg, age 4, was taken sick August 8, at the same time as case 2, and taken into the hospital. Both tonsils enlarged, patch on posterior aspect of right tonsil, tongue coated, bowels regular, urine normal, slight nasal discharge. Ordered same treatment as in case 1. Morning—temperature 100.4°, pulse 100, respiration 28; evening—temperature 100.4°, pulse 100, respiration 28.

August 9. Whole of right tonsil covered by membrane, discharge from both nostrils. Injected solution of mercuric chloride (1:2000) into nostrils every three hours. Continued other treatment. No albumen. Morning—temperature 100°, pulse 100, respiration 24; evening—temperature 100.4°, pulse 104, respiration 28.

August 10. Membrane covers same space as yesterday, left tonsil somewhat swollen, traces of albumen in urine. Continued treatment. Morning—temperature 99°, pulse 92, respiration 24; evening—temperature 98.4°, pulse 96, respiration 24.

August-11. Anterior aspect of right tonsil almost free of membrane, anterior nares inflamed from continuous discharge, some epistaxis, traces of albumen with sensitive tests. Morning—temperature 100.4°, pulse 108, respiration 26; evening—temperature 101.6°, pulse 120, respiration 28.

August 12. Several epistaxis during night, small patch of pseudo-membrane on posterior aspect of right tonsil visible, discharge from nose much diminished, albumen with nitric acid. Continued treatment. Morning—temperature 99.4°, pulse 104, respiration 28; evening—temperature 100.2°, pulse 100, respiration 28.

August 13. Membrane entirely disappeared, slight swelling and redness of right tonsil remains. Reduced mercuric chloride mixture to six doses in twenty-four hours. Discontinued injection. Albuminous urine. Morning—temperature 98.6°, pulse 96, respiration 24; evening—temperature 99.4°, pulse 96, respiration 24.

August 14. Discontinued bichloride and ordered four drops tinct. ferri chloridi every four hours. Less albumen, no reaction with nitric acid. Morning—temperature 98.2°, pulse 92, respiration 24; evening—temperature 99.8°, pulse 92, respiration 24.

August 15. Throat appears normal. All symptoms of disease disappeared, excepting some irritation of anterior nares and traces of albumen. Morning—temperature 98.4°, pulse 96, respiration 26; evening—temperature 99°, pulse 96, respiration 26.

August 18. Discharged to-day, with directions to continue iron. Urine albuminous.

August 24. Albumen was present in urine up to to-day. Discontinued all treatment. Boy looks well.

December 1. Boy has continued in excellent health since last report.

Case 4.—Mary Kenny, age 6, admitted to hospital August 23. Had a chill and fever during previous night and vomited once; both tonsils swollen, patch of pseudo-membrane on right tonsil, tongue coated, bowels rather loose. Ordered same treatment as in previous cases. Morning—temperature 101°, pulse 100, respiration 28; evening—temperature 101.2°, pulse 104, respiration 28.

August 24. Right tonsil and soft palate covered by membrane, small patch on left tonsil, right submaxillary gland swollen, complains of pain in taking food, had three stools to-day. Continued treatment. No albumen. Morning—temperature 99.4°, pulse 100, respiration 28; evening—temperature 101°, pulse 96, respiration 28.

August 25. Right submaxillary gland more swollen, right tonsil and soft palate covered by membrane, left tonsil clear but somewhat red and swollen, traces of albumen in urine, one passage from bowels, vomited once, slight epistaxis from right nostril. Continued treatment. Morning—temperature 99.2°, pulse 96, respiration 32; evening—temperature 98°, pulse 100, respiration 28.

August 26. Coughed up a piece of membrane about 1½ inches square. Small patch on left tonsil, right side of throat and palate clear of membrane, but still enlarged and red; albumen with nitric acid. Continued treatment. Morning—temperature 99.2°, pulse 96, respiration 32; evening—temperature 99.4°, pulse 100, respiration 24.

August 27. Albumen increasing, throat looks better, less swollen, membrane on left tonsil remains. Continued treatment. Morning—temperature 98.8°, pulse 100, respiration 28; evening—temperature 99.4°, pulse 92, respiration 24.

August 28. Swelling of right side of neck continues, left tonsil covered by membrane, child refuses food, seems homesick, no increase of albumen. Continued treatment. Morning—temperature 98°, pulse 96, respiration 32; evening—temperature 98.4°, pulse 96, respiration 32.

August 29. No change, appetite continues poor. Continued treatment. Morning—temperature 97.8°, pulse 96, respiration 28; evening—temperature 98°, pulse 80, respiration 24.

August 30. Less swelling of submaxillary gland, throat less swollen and patch of membrane on left tonsil much diminished in size, appetite better, urine contains albumen. Morning—temperature 98°, pulse 100, respiration 28; evening—temperature 98.2°, pulse 96, respiration 28.

August 31. Much better, throat free of membrane, left tonsil swollen, albumen and swelling of gland decreasing. Reduced mercuric chloride mixture to six doses in twenty-four hours. Morning—temperature 97.6°, pulse 96, respiration 28; evening—temperature 98.4°, pulse 80, respiration 28.

September 1. Appearance of throat normal, neck still swollen, appetite good, albumen present—no decrease since yesterday. Ordered four drops tinct. ferri chloridi every four hours. Morning—temperature 98°, pulse 88, respiration 28; evening—temperature 98.4°, pulse 88, respiration 24.

September 2. Nitric acid fails to indicate albumen, traces of it still indicated by picric acid. Continued iron.

September 8. Swelling of maxillary gland has disappeared, albumen disappeared from urine yesterday. Patient discharged to-day, with instructions to continue iron.

December 1. The child has enjoyed good health since she left the hospital

Case 5.—Agnes Camfield, age 5, was brought to me about noon on August 24, 1884, by her father, who requested me to remove "a grain of corn" which had become lodged in her throat. Upon examination I found a well-marked spot of pseudo-membrane on left tonsil. Admitted to hospital. Same treatment as in previous cases. Evening—temperature 98°, pulse 132, respiration 40.

August 25. Patch on left tonsil has not increased in size, but soft palate and right tonsil are red and swollen. Continued treatment. Morning—temperature 99.6°, pulse 76, respiration 32; evening—temperature 99.8°, pulse 88, respiration 36.

August 26. Restless last night, small patches on both tonsils and soft palate. Morning—temperature 99.2°, pulse 120, respiration 32; evening—temperature 98.8°, pulse 104, respiration 32.

August 27. Membrane disappeared from left tonsil, patches on soft palate and right tonsil remain. Continued treatment. Morning—temperature 98.4°, pulse 112, respiration 32; evening—temperature 98.2°, pulse 104, respiration 36.

August 28. Improving. Both tonsils clear of membrane, spot on palate. Continued treatment. Morning—temperature 98°, pulse 96, respiration 32; evening—temperature 97.6°, pulse 92, respiration 32.

August 29. Excepting some redness and swelling of tonsils and uvula, all symptoms of disease have disappeared. Morning—temperature 97.8°, pulse 100, respiration 36; evening—temperature 97.8°, pulse 100, respiration 32.

August 30. Spot of false membrane on lower posterior aspect of right tonsil, voice hoarse, croupy cough. Found her running around the ward in her bare feet yesterday. Her father, who acts as nurse, of which duties he is entirely ignorant, had taken her stockings off for the purpose of washing them. Both submaxillary glands were swollen in the evening. Have examined urine daily for albumen, with negative results. Continued treatment. Morning—temperature 99.8°, pulse 104, respiration 32; evening—temperature 100°, pulse 104, respiration 32.

August 31. Submaxillary glands and surrounding cellular tissues much swollen, patient looks pale, croupy cough, breath offensive, deglutition painful, large flow of saliva from mouth without any indication of mercurial salivation. Continued mercury. Ordered steam inhalations and inhalations of lime-water, one ounce every hour. Evening—voice almost absent, cough less frequent, paroxysms of suffocation. Ordered teaspoonful of mercuric chloride mixture, containing one thirtieth grain to the dose, every hour. Continued inhalations of lime-water and generation of steam (near patient's bed) by means of Weir's spray apparatus. Milk and beef tea at regular intervals; albumen with picric acid. Morning—temperature 99.4°, pulse 120, respiration 32; evening—temperature 101°, pulse 132, respiration 48.

September 1. Paroxysms of suffocation continued during night, respiration rose to 56. At 3 a. m., after a violent paroxysm, during which the membrane was undoubtedly coughed up and swallowed, she became easier and fell into a sound sleep. Found shreds

of false membrane in expectorations. Salivation, which was very profuse during the night, has ceased almost entirely. Continued mercuric chloride mixture, one drachm every two hours, and inhalations of lime-water every hour. Cannot talk above a whisper, glands of neck enormously swollen, albumen with nitric acid. Evening—slept a good deal during the day, coughed some, bowels constipated, glandular swelling of the right side of neck disappearing. Ordered tablespoonful of castor oil. Continued other treatment. Morning—temperature 98.4°, pulse 116, respiration 32; evening—temperature 99.4°, pulse 112, respiration 36.

September 2. Spent a good night, had three stools after taking oil, no pseudo-membrane in throat and mouth, less swelling of neck, voice weak. Continued mercuric chloride, discontinued lime-water inhalations. Urine albuminous. Morning—temperature 98°, pulse 108, respiration 36; evening—temperature 99.6°, pulse 108, respiration 36.

September 3. Voice better, breathing easy, glandular swelling of left side of neck hard and painful on pressure, albumen in urine not diminishing. Morning—temperature 98.2°, pulse 104, respiration 32; evening—temperature 98.8°, pulse 104, respiration, 32.

September 4. Voice still weak, but no difficulty in talking; appetite excellent. Discontinued mercury. Ordered four drops tinct. ferri chloridi every four hours. Albumen in urine decreasing—negative result with nitric acid.

September 8. No albumen to-day, left side of neck still swollen hard and tender, voice weak. Painted swelling with iodine. Continued iron. Discharged from hospital.

September 14. Poulticed glandular swelling for the past two days. Abscess opened to-day, voice still weak, in excellent condition otherwise. Continued iron.

September 25. Abscess healed, voice normal, general health good. Discontinued all treatment.

December 1. Child has enjoyed excellent health during past two months.

In addition to the treatment specified in the above cases, steam was generated in the ward occupied by these patients almost continuously, by means of Weir's spray apparatus. The diet consisted of milk and beef tea. One quart of the former and one-half pint of the latter constituted the minimum allowance in twenty-four hours.

A carefully kept record of doses given shows that case 1 took two grains of bi-chloride in seven days; case 2, two and one-eighth grains in eight days; case 3, one and one-half grains in six days; case 4, two and seven-twentieths grains in nine days; case 5, three and one-fifth grains in eleven days. The average age of these children was a little over six years, ranging between four and ten years. In none of these cases were symptoms of mercurial poisoning produced. No mercurial salivation was noticed, and the bowels in all of these cases were inclined to be constipated.

As to the physiological action of the mercuric chloride I have no new explanation to offer. To make intelligent observations of its action a continuous chemical examination of the secretions of the body, as well as a microscopic examination of the blood, becomes of course necessary. At the time the above-mentioned cases were under treatment in this hospital my duties were such as to prevent me from making these examinations. I had, however, completed arrangements which would have enabled me to carry out these investigations, but circumstances which were beyond my control prevented me again from completing my researches in these directions. I may, however, state that in two of the cases reported above, and in which I examined the saliva and urine for mercury, I found this substance present on the second day after giving the mercury, and its presence was still indicated in the urine for four and five days after ceasing the medicine.

There can be no doubt, I presume, that the mercuric chloride upon entering the stomach, and part of the salt possibly before it reaches it, becomes converted into an albuminate of mercury. This is precipitated, but becomes again soluble by an excess of albuminous fluid, sufficient of which must usually be contained in the stomach to dissolve the precipitate formed by the small quantities of mercuric chloride given in the cases under consideration. It should also be remembered that sodium chloride and ammonium chloride, the latter of which was given in combination with mercuric chloride, hold mercuric albuminate in solution, and that on the other hand alkaline solutions of albumen are not precipitated by corrosive sublimate.

I made numerous experiments by exposing boiled white of egg, washed fibrin or fresh milk to the action of artificial gastric juice, and precipitating the acid albumen thus formed by mercuric chloride and redissolving the mercuric albuminate in an excess of albuminous fluid, but I was unable to illustrate the formula of mercuric albuminate as it becomes absorbed by the blood. The indications are, however, that an albuminate of mercuric oxide is formed and that it enters the system as such. Whether in this form it acts as a germicide I am not prepared to say from personal observation. The well known action of mercuric chloride of arresting the development or multiplication of micro-organisms in broken down beef broth and the late experiments of Sir Joseph

Lister with albuminate gauze seem to indicate that at least the antiseptic actions of mercuric albuminate are as powerful as those of mercuric chloride.

Taking it for granted that mercuric albuminate acts as a germicide, the question whether enough of this substance is absorbed by the blood to sterilize it or to arrest its decomposition, and consequently destroy or control the activity of any micro-organism which may be contained therein, remains to be considered. It appears doubtful whether sufficient of mercury and any of its combinations can at any time be contained in the blood to control the development of micrococci or bacilli. Ingenious arguments have been advanced to support this theory; but in most of these propositions little attention was paid to the elimination of the mercury by the system. Mercury is found in all the secretions of the body—urine, saliva, feces, and probably sweat, and to arrive at a conclusion a continuous quantitative analysis of the secretions of patients taking mercuric chloride becomes necessary. It is, however, well understood that mercury possesses a cumulative action, and sufficient may therefore be retained in the system to sterilize the blood, and thus suspend the development of micrococci or bacilli or kill them. Its action may also be confined to lessen the formation of plastic exudate, and for this reason it is undoubtedly of great value in the inflammatory type of the disease. But whatever its action may be, the above cases will illustrate that the administration of mercuric chloride in diphtheria, during all stages of the disease, is followed by success. Its value in controlling the offensive nasal discharge and arresting the formation of pseudo-membrane in the nasal passages becomes especially apparent. In all of the above cases symptoms of the disease involving the nares were present, but the injection of a solution of mercuric chloride (1:2000) soon controlled this complication.

Moist air seems to be of great benefit in the treatment of the disease. As above stated, steam was almost continuously generated in the ward by means of Weir's spray, and as long as the air of the room remained moist, the breathing of the little patients was usually normal. If the air was allowed to become dry respiration became at once more labored.

It will be noticed that in two of these cases, where laryngeal symptoms appeared, inhalations of lime-water were used with apparent success. The beneficial effect of the lime-water spray appeared most apparent in case 5. It seemed to me as if at times, when inhaling the spray, the breathing of the little girl indicated that the membrane became dissolved or loosened, and I expected, on more than one occasion, to see her cough up tubes of false membrane. Unfortunately, the child was rather self-willed, and she usually failed to expectorate the matter coughed up, thus robbing me of an opportunity of obtaining tubes of false membrane, and illustrating beyond doubt the value of the lime-water spray. It was clearly to be seen that, as soon as the lime-water spray entered the mouth, and possibly even before that, the greater part of calcium hydrate contained in solution was converted into calcium carbonate, which was no doubt redissolved by the saliva and expectorations contained in the buccal cavity and throat, these fluids being naturally saturated with carbonic acid. In speaking of the inhalations of lime-water, I may be allowed again to call attention to the useless method of "causing the patients to inhale the vapors arising from lime undergoing the process of slaking with water." Numerous experiments have convinced me that no lime is carried along with the vapor arising from slaking this substance with water, either in solution or mechanically, and the only benefit derived from this process is the generation of moisture, which may, however, be produced in a more continuous manner by the spray apparatus.

Before leaving the subject of lime-water I desire to call attention to a few other experiments which I made with different solvents for pseudo-membrane.

A solid piece of membrane was obtained from case 4, which was divided into equal parts of almost the same density, and these pieces were placed in lime-water (U. S. P.), solution nitrate of silver (5 per cent.), solution acid carbolic (5 per cent.), and solution potassium chloride (saturated). Within fourteen hours the false membrane placed in the lime-water was dissolved, and in thirty hours separation of the tissues took place in the piece suspended in the saturated solution of potassium chlorate. No changes, however, could be observed in the pieces immersed in the carbolic acid and silver solutions, excepting discoloration of the parts. I examined these pieces a few weeks ago, about five months after immersion, and I found the membrane preserved in the silver solution to be covered by a crust of deeply stained tissue, while the interior of this piece exhibited under the microscope the peculiarities of false membrane. The piece preserved in the carbolic acid solution was extremely well preserved and hardened, and allowed the making of fair sections for microscopic examinations.

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No. 8.—*Report of a case of extirpation of the female breast for supposed scirrhus. By Asst. Surg. L. A. LaGarde, U. S. Army, Fort Ellis, Mont.*

Charlotte Taylor, a colored servant with the family of Capt. James A. Snyder, Third United States Infantry. October 25. Mother of two children; one of her aunts, on her mother's side, died of a large, painful tumor of the breast, which was attended with ulceration.

On examination, March 10, the patient stated that six months before she first noticed a hard lump in her left breast, and that it had caused sharp, cutting pains of late. Palpitation of the left mamma gave evidence of a hard, smooth, freely movable, intra-mammary tumor, as large as the end of the thumb, to the right of the nipple. Diagnosis of a malignant tumor was made, and extirpation of the gland was advised.

March 12.—In consultation with Dr. Beach, acting assistant surgeon, U. S. Army, the diagnosis was confirmed and extirpation urged. At this examination enlarged lymphatic glands were specially looked for, and none were found.

March 29.—Extirpation was done to-day at 11.30 a. m., at the house of a regular nurse in Bozeman, Mont. At 11 o'clock, thirty minutes before the first incision, all the instruments, the drainage tubes, the sponges (prepared according to Kellar, Esmarch's Hand-Book), silk sutures and catgut ligatures, were immersed in a 5 per cent. solution of carbolic acid contained in a basin and one large plate. The hands of every assistant were then thoroughly washed in carbolic acid of the same strength, and the part to be operated upon was similarly asepticised. Etherization having been induced, preceded by a one-third grain of sulphate of morphia, hypodermically, the patient was placed upon her back; the left arm was raised, while I took my position as operator, between her right shoulder and head, looking obliquely across her chest. Everything being ready, a curved incision was made below the nipple, 8 inches long, extending from without inward, down to and nearly parallel with the fibers of the pectoralis major. The gland, supported by the left hand, was rapidly dissected from its muscular attachments, whilst Dr. Beach made firm pressure on bleeding points with sponges. The operation was now completed by a curved incision above the nipple, making, with the incision previously described, an ellipse, with the nipple as a center. Three bleeding points were tied with catgut ligatures. After the oozing had ceased the wound was dried of blood, the surface of it was irrigated with a 2½ per cent. solution of carbolic acid, and its edges were carefully brought together by twelve silk sutures, about half an inch apart. A small, fenestrated, india-rubber drainage tube was inserted in the axillary angle; the line of incision was covered with powdered iodoform, and the wound was dressed (1) with a piece of dry sheet lint, (2) a piece of protective oiled silk, (3) a wad of salicylated jute, and (4) these were secured to the parts by a moderately firm bandage around the body.

March 30, 11 a. m. Temperature 99°, pulse 84, urine drawn with catheter, nausea and vomiting till 12 o'clock last night, after which she slept until 4 a. m. At 6 p. m. the nurse telephones that the patient is resting very well. Temperature 98.2°.

March 31, 12:30 p. m. Temperature 98°. Wound dressed as before. The drainage tube had slipped inside the wound nearly out of sight; it was withdrawn and put in place with a pair of forceps. No evidence of inflammation whatever in any part of the wound. Six p. m., nurse telephones all is well; temperature 98°.

April 1, 12 m. Temperature 98.3°. Primary union of wound, every other suture removed, drainage tube withdrawn, no pus on it, wound dressed as on yesterday. Temperature at 6 p. m. 98.1°.

April 3, 11:30 a. m. Temperature 98°. The remaining six silk sutures were taken out. Patient propped in bed and told to walk around the room.

April 5. Patient walked to church to-day.

The healing of this operative wound by first intention was probably as perfect as the most sanguine enthusiast of the Lister method could desire. It healed without the least evidence of pus on any of the dressings. I must admit that I have never witnessed the like before. Dr. Beach, who has seen a great deal of acute surgery, makes the same admission. I must confess that I never before operated under such strict antiseptic precautions, and I am quite convinced that the precautions, though not so rigid as they might have been in this case, did a great deal to nullify the vital activity of micro-organisms.

APPENDIX F.—SPECIAL REPORTS UPON ANEURISM BY MEDICAL OFFICERS OF THE ARMY.

No. 1.—*Report of a case of aneurism of the arch of the aorta, accompanied by phthisis pulmonalis and gangrene of the lung, resulting in death from exhaustion. By Surgeon W. E. Waters, U. S. Army, Fort Clark, Tex.*

Private Michael Hickey, Company L, 4th Cavalry, a native of Ireland, and 27 years of age, was admitted into hospital at Fort Clark, September 9, 1878, by transfer from the camp of his company a few miles distant. He had been on sick report in camp since August 18, 1878. While under treatment in camp, dyspnoea was the only thing that attracted the attention of the medical officer. When received into the hospital he suffered from continuous dyspnoea, and in the respiratory act there was prolonged wheezing expiration; breathing not affected by position. On percussion there was increased resonance over the right lung, as in slight emphysema; but a healthy sound was obtained over the left, except at the apex and near the sternum, where there was circumscribed dullness. The respiratory sounds throughout the right lung were puerile, and slight sibilant rales were heard in the left, with absence of all breathing sounds in the region of dullness. He also suffered from an annoying cough, with no expectoration. He had some hoarseness of voice and some dizziness. There appeared to be slight bronchitis of the left lung. He complained of no pain in the chest. His temperature was normal. There was no difficulty in deglutition. He was well nourished for a soldier who had been on active duty. Suspecting an aneurism, I most carefully auscultated the region of dullness without hearing the slightest bruit, nor could I by palpation discover any unusual pulsation. There was no bulging of the chest walls. Assistant Surgeon W. C. Shannon, United States Army, made the examination with me and concurs in what I have written.

The patient had been taking iodide of potassium while in camp, and I continued its administration, increasing the dose until it reached fifteen grains three times a day. For a month and a half he continued its use without apparent benefit, when it was suspended, irritability of the stomach arising about that time. He had also taken a cough mixture of a relaxing expectorant; but the cough had increased and the paroxysms were long continued. The dyspnoea had not materially changed in character. Whenever I had felt his pulse I had happened to be on his left side; but on one occasion, about October 1st, I chanced to take his right hand and discovered that there was no pulsation at the wrist in either the radial or the ulnar arteries. It was scarcely perceptible in the brachial and feeble in the axilla and over the subclavian—so feeble that I could not determine whether its rhythm was in proper relation to the heart's action, or the pulse of the opposite side. My previous suspicions of aneurism were then increased. At this time Assistant Surgeon Comegys, U. S. Army, was at the post and we examined the case together, but could discover no signs of the aneurism, though it was found that the extent of dullness had increased. This arose from pulmonary consolidation, catarrhal phthisis having supervened, and soon thereafter signs of softening were discovered and a large cavity formed at the apex of the left lung, which opened into the bronchia. Abscesses followed in rapid succession, and from these extended diffused gangrene of the lung. The sputa were of a greenish gray color, shreddy, very offensive, and very abundant. The odor was not confined to the sputa, but the breath of the patient was so offensive as to be exceedingly disagreeable to the other patients in the same end of the ward, and almost nauseate those who went near him. The course of the pulmonary disease was exceedingly rapid. He died from exhaustion November 16, 1878.

Post mortem examination made five hours after death.—Body considerably emaciated and rigor mortis marked. When the chest was opened there was slight collapse of the right lung and none of the left. Under the upper portion of the sternum and encroaching upon the left lung, the anterior margin of which was pushed backward, was a large tumor resembling a displaced heart and pericardium. The left lung was firmly bound to the chest walls and the diaphragm by adhesion between the two layers of its lining membrane, by which the plural cavity was entirely obliterated. The lung was filled with the nodules of catarrhal phthisis. A vertical incision revealed a large cavity at its apex, and numerous smaller ones throughout the extent of the incision, several of which, running into each other near the base of the lung, gives it a honeycombed appearance. The whole lung tissue seems to have been in a disorganized condition, and during life the sputa and odor of the breath indicated very clearly that a gangrene had existed for several days before death. The tumor referred to proved to be the sac of a true aneurism of the arch of the aorta, nearly circular, measuring 13 inches in its larger and 12 inches in its smaller diameter before it was incised. It was firmly adherent to the lung, and rested on the pericardium, having pressed the heart downward. The upper half of the sac was filled with a fibrinous coagulation, having more of a shreddy appearance than of a laminated structure. In this fibrinous clot, at the upper portion, there was fluctua-

tion, and the incision through the specimen opened into a cavity containing serous liquid mixed with flaky debris of the broken-down fibrinous mass, which, in that position, had tended to disintegration rather than organization. There is no connection between this cavity in the clot and the cavity of the sac through which the circulation was carried on, and which was found in the autopsy filled with a post-mortem clot. The stretching of the coats of the aorta as the sac enlarged changed the relations of the arteries given off from that vessel, so that the left subclavian is separated 2 inches from the left carotid, and this vessel 3 inches from the innominate. The space occupied by the clot is above a curved line extending from the subclavian on one side to the innominate on the other, both of which vessels were open, as the blood current through them prevented any further accretions of fibrin in the sac. The mouth of the left carotid was occluded by the clot. The heart is of normal size, with very slight if any thickening of the left ventricle. The semilunar valves of the aorta appear from such examination as can be made from the incision in the aneurismal sac as healthy. The absence of the aneurismal sounds was owing to the fibrinous deposits in the upper portion of the sac which was the part nearest to the surface of the chest, and the current of blood was made more direct by this filling up, and the bruit had doubtless diminished in intensity. This deposit of fibrin may have been in a measure owing to the iodide of potassium he had taken, though it must have occurred to a great extent before he came under my observation. The position of the tumor was such as to press upon the right subclavian artery, where it passed behind the first rib, and thus reduced the circulation through that vessel, which was pervious. The dyspnoea was probably from physical causes also, consisting of pressure upon the right bronchus, and the upper portion of the right lung. The hoarseness may have arisen from compression of the left recurrent laryngeal nerve, but it was not attended by aphonia. The fibrinous clot had occluded the entrance of the left carotid, and by shutting off a portion of the circulation of the brain, probably caused the dizziness he complained of.

No. 2.—*Report of a case of double rupture of an aneurism of the ascending aorta, with survival of the patient for several weeks subsequent to the primary rupture. Final result, death. By Surgeon F. L. Town, U. S. Army, Fort Sill, Indian Territory.*

Marcial Cardenas, private, band, Fourth Cavalry, age 32, a Mexican by birth, of a gross habit, appeared at sick call April 11, 1876. He complained of shortness of breath and inability to blow his instrument, a brass horn, and was admitted to sick report. On the 15th instant, four days afterwards he was seized in quarters with sudden faintness and alarming prostration. Acting Assistant Surgeon J. L. Powell, who saw him immediately afterwards, found an entire cessation of respiratory movement, a murmur over the right side of the thorax, and universal flatness on percussion; while the respiratory movements of the ribs on the left side were evidently increased; marked pallor of the face and skin prevailed, and the pulse was extremely feeble. At this time there was no loss of consciousness, or apparent paralysis. Two or three hours later he was seen by me. At that time he was unconscious, but frequently moved his right extremities restlessly and paralysis of the left side evidently existed, as he did not move the left arm or leg; the angle of the mouth inclined to the right, the lips puffed occasionally in breathing, both pupils were moderately dilated, and the muscles of the right eyelids vigorously resisted exposure of the eye, while those of the left eyelids were helpless. Besides these symptoms of apoplexy, there was apparent an unusual pallor, and coolness of the entire surface of the body, a manifest condition of collapse, which could not be satisfactorily accounted for; the pulse was barely perceptible. The flatness on percussion over the right lung, and absence of vesicular murmurs had in a considerable degree disappeared anteriorly; the lung floating above the fluid, the decubitus being dorsal. Consciousness returned during the following night, but the hemiplegia, pallor, and coolness of the surface continued, and for two weeks thereafter his condition was very critical. After this time a more rapid improvement took place; the action of the heart gradually increased to nearly normal strength, the paralysis diminished, and he recovered slowly the use of the left extremities; the hand, however, dangled helplessly for some time before he regained command of the muscles of the forearm. For some two weeks or more prior to his death he went about the hospital and grounds, had a fine appetite and slept well; even extended his walks on a few occasions down to the band quarters, some distance from the hospital building. When asked as to his condition he always claimed that he felt very well. Locomotion, however, was a little unsteady, and the grasp of the left hand was quite infirm; the tongue, when protruded, still curved much to the left.

May 28. As the patient was in the act of sitting down to dinner, sudden faintness came on and he vomited a large quantity of fresh arterial blood. No further hemorrhage occurred during the afternoon. When last seen by me, about 8 p. m., although greatly blanched and nearly pulseless, he stated that he was "pretty comfortable." "didn't

feels sick,"—and had taken a cup of tea. At 9:30 p. m. a violent hemorrhage occurred from the mouth and nose, with an almost immediately fatal result.

Autopsy thirteen hours after death.—The right pleural cavity contained a large amount of dark disintegrating coagula and fluid blood which had evidently extravasated some time prior to death. This extravasation occurred within the pleura pulmonalis, and was confined behind and below the lung, which was compressed forward and upward. Considerable damage had resulted to the superficial parenchyma of the lung posteriorly, especially near its posterior border, through which the escaping fluid had effected an entrance from the descending aorta. The pleural surfaces were firmly adherent to the chest walls—and also to the lung itself—along the external surface and base. These adhesions were old, and had limited the amount of extravasation. To their strength was probably due the temporary preservation of the patient's life by preventing the general diffusion of the escaping fluid throughout the pleural sac and the forcible compression of the lung into the apex of the thorax. About one inch and a quarter below the origin of the left subclavian artery a sacculated aneurism of moderate size, with a large mouth, projected from the right of the descending aorta in front of the œsophagus; the aneurismal pouch was oval, and from 1 to 2 inches in its long diameter. A circular ulceration through the sac, about 3 lines in diameter and immediately over œsophagus, indicated the position of the fatal rupture. After a little search a second small opening through the sac nearer its mouth was found, which communicated to the right and behind the œsophagus, directly with the extravasation within the right pleura. Moderate tubular dilatation of the aorta existed for a short distance above and below the aneurismal sac, and a few atheromatous patches and calcareous deposits were observed in the vicinity. The sac contained a small amount of clot, and was partially lined by a thin lamina of fibrin, which is believed to have occluded the passage to the right thorax. The tissues and valves of the heart were in a healthy condition, although this organ, as well as the whole vascular apparatus, was found nearly bloodless. The kidneys appeared to be in the early stage of Bright's disease. During the life of the individual no particular complaints were made, nor were there any symptoms of aneurismal pressure. The membranes and convolutions of the brain presented a healthy appearance, with no special increase in quantity of the cerebro-spinal fluid. A portion of the upper surface of the middle lobe of the right hemisphere partially fell in, forming a shallow depression, 2 inches or more in diameter, owing to handling the brain during and subsequent to its removal; this sufficiently indicates the extent of inflammatory softening of the brain structure beneath.

No evidences of inflammation, or injection of the vessels of the pia mater covering this region, were observed. Over the opposite hemisphere, however, the latter membrane was slightly vascular. On slicing the brain, the greater part of the interior of the right middle lobe was found to be occupied by a collection of semi-fluid purulent matter and more or less disorganized brain tissue, which approached to within a short distance of the surface of the hemisphere both above and below, and encroached somewhat upon the anterior lobe. Immediately surrounded by completely disorganized cerebral tissue was the supposed extravasation previously referred to, which was not less than $2\frac{1}{2}$ inches in length and half an inch, or more, in diameter. It exhibited but slight discoloration of its substance, was encysted, and firmly connected by its envelope with the posterior branch of the right middle cerebral artery, which appeared to suddenly terminate at the junction. This small vessel was dilated to more than twice its normal caliber, and was plugged back about an inch to its origin from the middle cerebral; the latter vessel was also slightly larger than usual, or the corresponding artery on the left side. In this somewhat remarkable case a rupture of the posterior branch of the right middle cerebral artery had at some time taken place, with the formation of a clot within the middle lobe of the right hemisphere. Around the latter extensive inflammatory softening had resulted in an abscess of considerable size, with accompanying symptoms of coma, and paralysis of the left side, &c. Just prior to these manifestations of brain lesion it would appear that a sacculated aneurism of the descending aorta had burst into the right pleural cavity, largely filling the right thorax with blood and compressing the lung. These grave injuries to important organs were not followed, as might have been anticipated, by speedy death. The individual survived six weeks, the hemiplegia gradually disappearing, and from a condition of almost complete collapse he slowly regained his strength, and was apparently progressing favorably toward ultimate convalescence, until a second rupture of the aneurismal sac into the œsophagus occurred, and death soon followed.

No. 3.—*Report of a case of double aneurism of the ascending and thoracic aorta, resulting in death by rupture of the sac. By Asst. Surg. J. H. Patzki, U. S. Army, Fort Fetterman, Wyoming Territory.*

Private James Keating, Company F, Fourth Infantry, age 30. Was admitted to hospital October 31, 1873, with symptoms of asthma, and with this diagnosis the case was en-

tered upon the subsequent monthly reports. He died of aneurism of the arch of the aorta, March 15, 1874. When taking charge of the hospital (December 15, 1873), I gathered the following information from the patient: He was a blacksmith, usually temperate, without constitutional taint; was subject to catarrhal disease, but had enjoyed comparatively good health until the fall of 1872, when he experienced some difficulty in breathing, pain in the chest and cough which, as he said, was especially severe in September, 1872, "when he could be heard for miles." He applied for treatment at the different posts, Little Rock, Elizabethtown, D. A. Russell, but his complaint was considered trivial, and he was compelled to continue at work as blacksmith until last October. His face bore the expression of severe suffering, but no cachectic appearance; body tolerably well nourished; his attitude had a peculiar stoop and twist; his breathing was labored, wheezing; his cough had a metallic ring and a peculiar distant sound, as if proceeding from the depth of his chest. At night he was distressed by severe paroxysms of dyspnea, and was unable to assume the recumbent position. He complained of severe pain in his back between his shoulders, and of some over midsternum; pressure over the spinous processes of the upper dorsal vertebrae was quite painful. The right side of his chest was markedly but uniformly prominent; right hypochondriac region especially so, which was very tender on pressure; both sides of chest, throughout, resonant; respiration over right side very harsh, with sibilant and sonorous rales; it was almost absent over left, especially in front. Very careful and repeated auscultation failed to reveal any bruit or abnormal pulsation in the vessels; the sound over the right costal cartilage was normal, though somewhat marked by the noisy respiration of that side. Only once (January 25) was a coarse, indistinct bruit perceived over the ascending aorta, close to its origin; percussion over the track of the aorta failed to establish change of resonance or pitch; the left pupil decidedly smaller than right; no difference in pulse of radial arteries; hepatic dullness increased; no albumen in urine.

The case was diagnosed as aneurism of the descending portion of the arch or upper portion of the thoracic aorta, compressing left bronchus and left inferior laryngeal nerve. On account of the absence of bruit or abnormal pulsation, and in consideration of the bulging and tenderness in the left hypochondrium, the possibility of a carcinomatous growth in the posterior mediastinum was thought of, and therefore a correction of the original diagnosis was deferred until the *post-mortem* examination should have removed all doubt. His condition grew gradually worse; he had syncopal attacks usually toward morning, followed by profuse bilateral perspiration; he described the pain as being occasionally of a beating character and see-sawing while stooping. February 4, first bloody sputum. February 6, left pupil dilated. February 9, slight dysphagia; placed upon fluid diet. February 10, dysphagia more pronounced. Patient describes his sensation as of something bulging upward, the cough more of a brassy sound than heretofore. February 14, hyperaesthesia of left side noticed for the first time. During the latter half of February he began to improve again, and on the 25th the dysphagia had entirely left him, but on that day he complained of a slight numbness and coldness of extremities, especially of the lower, more marked on the left side. From an early date the patient was very sensitive to draught, which chilled him "to the marrow," as he described it. March 4, complains of increased numbness and coldness of lower extremities; describes pain as of a more fixed character, no longer radiating and lancinating as heretofore. On the 8th he expectorated another sputum tinged with florid blood, the second and last during his sickness. During the following days all the symptoms became more and more aggravated. On the evening of the 15th he was moribund, evidently from exhaustion. The diagnosis appeared even as late as then not quite free from doubt; the only change in the physical symptoms being impairment of resonance and tubular breathing over root of right lung; bruit and abnormal pulsations could never be distinctly found, although patiently searched for. At 11:40 p. m. he was seized with a violent cough, arterial blood gushed from his mouth and nose, and death closed the scene. The temperature was never above, but often below, the normal. The treatment prior to December 15 had consisted in various anodyne and counter-irritating applications, the administrations of hyoscinamus, Dover powders, and cod-liver oil, with ether. During the latter part of December belladonna in decided doses was tried without benefit; since then tonics, and occasionally stimulants, were given, and increasing doses of morphine (gr. $\frac{1}{4}$ to gr. i) hypodermically injected. The latter greatly alleviated the agonizing pain, and the improvement from the moment the pain ceased to harass the patient without respite was very remarkable. The orthopnea ceased not to return to the last. The appetite, strength, and spirits for a time improved, so as to inspire him with a fallacious hope. Toward the last morphia failed to relieve, and during the last days of his life the sufferer was kept under the uninterrupted influence of chloral. From the beginning absolute rest was enjoined, and the patient warned against sudden movements and straining at stool.

Post-mortem examination eleven hours after death.—Brain and meninges intensely congested, otherwise normal. In the chest the pleurae were found adherent over the upper

lobes, especially on the right side, where, in breaking the adhesions, the finger passed into a cavity filled with soft coagula. The aorta, about one and one-half inches above semilunar valves, presented an aneurismal pouch of the size of a walnut, containing no coagula, and compressing the superior vena cava. At the origin of the left subclavian the arch contracted to nearly the normal dimension, and then offered in its descending portion another aneurism of the size of a small orange, filled with soft coagula, firmly adherent to the spinal column and the upper lobe of the right lung, into which it had finally opened. The bodies of the second and third vertebra were deeply eroded, but the medulla was not exposed. The left bronchus and the left recurrent nerve were compressed between the two aneurismal sacs, while the trachea and the œsophagus appeared to have escaped by the large sac being held out of their way by firm adhesions posteriorly, and a little to the right of the median line. The œsophagus exhibited on its anterior wall, about one-half inch below the bifurcation of the trachea and behind the left bronchus, a puckered pouch, admitting the point of the little finger. There was great thinning of its walls, and it was drawn to the left by adhesions formed into the larger aneurismal sacs. The lining membrane of the aorta and larger vessels was free from deposit, the heart and valves normal, the former rather small. Both lungs showed some emphysema, right greatly congested; lower lobes of both, but especially of right, solid from sanguineous infiltration. Liver congested, anterior margin thick and irregular, opaque patches on its peritoneal coat. Other organs normal. It is not surprising that in this instance the pathognomonic sounds could not be perceived; the pouch of the ascending portion being too small and smooth to betray itself, while the larger one had added by layers of plastic matter to the thickness of the tissues interposed between it and the ear, and thus all distinct sounds were masked.

No. 4.—*Report of a case of aneurism of the ascending aorta, with occlusion of proximal portion of the superior vena cava and rupture of aneurism into the unobliterated distal portion of the superior vena cava. By Assistant Surgeon W. C. Shannon, U. S. Army, Fort Bridger, Wyoming Territory.*

About 6 o'clock on the evening of December 24, 1884, I was called to see First Sergeant Malloy, Company C, Ninth Infantry. I found him seated in the company office able to converse, rise and offer me a chair, but very blue and swollen in the face, with protruberant eyes, bloody tears, varicose and pulsating jugulars, with respiration only a little accelerated and noisy, with a constant effort to clear the nostrils and with a voice as one with a bad cold in the head. The sergeant was able to inform me that while at supper he became very much excited, on account of two men who were fighting near by; that after he had quieted the disturbance (he exerted no physical strength) and ordered the pugilists to the guard-house, he turned toward the dining table and directly felt a terrible sense of fullness in the head, as of blood rushing there; that his vision grew dim, his heart beat fast and his strength failed him so that he supported himself by a chair. The sergeant was immediately assisted to the office and his room, where a little later I found him. No history of previous trouble could be elicited, except that during the preceding few days a slight dizziness had occurred only when stooping. On physical examination the heart was beating rhythmically, and nothing wrong could be found on repeated examination. A murmur at second costal cartilage, right side, occurring with the second sound, was heard at my first examination, but repeated auscultation failed to bring the same again to my ear. The breathing was hurried, noisy and somewhat bronchial, and no doubt obscured the actual condition present. The external and anterior jugular veins were plainly distended to their fullest capacity, as shown by their prominence and by the cyanosis of the head, particularly the ears. The subclavian veins were not greatly distended, as the veins were not prominent, and the limb was not blue or swollen. The internal jugulars were not sufficiently distended to cause unconsciousness at any time, or even to render the patient stupid, until near the end. No paralysis existed from first to last. About one hour after the first trouble the patient vomited, and later vomited several times. Thirst was constant. About two hours after the attack began the patient commenced to complain of a very severe pain in the back between the scapulae, which pain continued until death. The heart continued to beat evenly, with a fair soft pulse to the end. All the other symptoms increased in intensity as the hours passed. After the first hour the patient lay down; and later in the evening an effort to rise produced some dyspnoea. Between 11 and 12 o'clock the patient would frequently call for air. Shortly after 12 a terrible attack of laryngeal dyspnoea occurred, rapidly increasing in intensity, until the struggle for air became fearful, and the scene closed in death, about six hours after the first symptoms occurred.

Treatment.—At first rest and potassium bromide, with hope to relieve brain pressure, was directed. The bromide was vomited. About 8.30 p. m., phlebotomy at the median cephalic vein was performed with not the slightest impression on the cyanosis of

the face. About 10 p. m., phlebotomy at the upper portion of the external jugular was performed, with not the slightest relief or effect on the cyanosis. The blood was thrown out of the vein through a very small opening with great violence. No difficulty was experienced in checking the hemorrhage. The amount of blood taken was about one pint, which caused a temporary faintness, weakness of pulse for a short time, and a very slight attack of dyspnoea. In the last struggle, thinking that oedema of the glottis might possibly be the cause of the laryngeal dyspnoea, an attempt to perform laryngotomy was made, but the engorgement of the neck was so extreme and the hemorrhage so profuse that death occurred before the larynx could be opened. The air rushed into the trachea with a loud noise when the knife penetrated the cricoid membrane.

Autopsy.—Body of man very heavy, and thickly covered with adipose tissue. Large, thick, short neck. Brain 49 ounces, normal, rather full of blood. Cyanosis of face disappeared shortly after death. Lungs normal, filled with blood, would float in water. No pleuritic adhesions. Pericardium showed old adhesions of limited extent to aorta. Heart normal, except a linear cicatrix in right auricle in place of opening. Aorta.—A true aneurism commenced just above the coronary arteries, extending to the innominate artery, where it became fusiform, and continued in transverse aorta to and including the opening of the left subclavian artery. The dimensions were 8 inches on the total convexity, 3 inches deep in the sac, and $3\frac{1}{2}$ inches wide in the sac. The inner surface of the aneurismal sac presented small round or oval ulcers, and a recently torn valvular opening, about three lines long, communicating with the portion of the superior vena cava in close continuity with the innominate veins. No calcification of walls of aneurism. Weight of heart, aneurism and vessels preserved in specimen, 19 ounces.

Superior vena cava.—The proximal portion was entirely obliterated. As the heart and diseased aorta were taken out before the occlusion of the vena cava was discovered, the collateral circulation could not be traced satisfactorily. The only large vein observed that could answer this purpose was the left superior intercostal, which was about the size of either innominate vein.

Mediastinum.—The structures of this region about the great vessels and root of the lung were matted together. Liver normal, engorged with blood. Kidneys and spleen normal, engorged with blood. No oedema of the glottis existed.

Microscopical examination.—Section through an ulcer showed curled up edges of the thickened internal layers of aneurism, an infiltration of every layer with collection of leucocytes, a great increase of fibrous tissue; the internal layer was especially thickened; the middle layer was practically devoid of muscular fiber. No atheroma could be found. The only fat cells found were in a layer on the outer coating of the aneurism.

Remarks.—It is supposed that the growth of the aneurism was gradual; that collateral circulation efficiently prevented the oedema usually present in occlusion of the superior vena cava. The vomiting which was present in the case during the evening of the patient's death was no doubt due to the engorged condition of all vessels in the mediastinum after rupture and the consequent pressure on the sympathetic. The extreme cyanosis of the face and parts supplying the external and anterior jugular veins and the comparative freedom from engorgement of branches of the subclavian and internal jugular veins were due to the usual anatomical insufficiency of valves of the external and anterior jugular veins as compared to the valves of the subclavian and internal jugular veins. The laryngeal dyspnoea, which was the immediate cause of death, may have occurred from a gradually increasing pressure on one or both recurrent laryngeal nerves by the intense venous engorgement, slowly and surely advancing during the six hours of the patient's illness, producing either spasm or paralysis of the muscles of the larynx.

[NOTE.—Examination of museum specimen shows: Aneurism of arch of aorta. Rupture into vena cava. Heart and arch of aorta has sacular aneurism of ascending portion; the sac involves chiefly the right upper posterior parts of the vessel; walls of sac thick and somewhat adherent to adjacent tissue; inner surface rough and irregular, and shows small depressions from degeneration and loss of substance; in posterior wall is a small lacerated opening, leading into the distal portion of superior vena cava, its proximal portion being obliterated in the sac wall, except one-half inch of cardiac end, which is patent, but narrowed. Diameters of sac 3 and $3\frac{1}{2}$ inches.

No. 5.—*Report of a case of aneurism of the abdominal aorta, resulting in death from rupture of the sac. Disease supposed to have originated from a gunshot injury of the arterial coats. By Assist. Surg. J. V. Lauderdale, U. S. Army, Fort Wingate, N. Mex:*

Daniel Prince, private, Company K, Fifteenth Infantry, patient native of Ireland; serving fourth enlistment; addicted to alcohol; not often intoxicated; height, 5 feet 4 inches; weight, 150 pounds; well nourished; general health good; has been sick a few days at a time with constipation, diarrhea, intermittent fever, rheumatic pains in

back. Admitted to hospital April 2, 1878, complaining of an unusual fullness of his abdomen. Voice generally hoarse, manner intelligent, temperature natural, gait slow and appearing as if he had a rheumatic pain in his back, situated in lumbar region near spine on left side. No swelling of limbs or feet. Percussion over abdomen gave signs of flatus of intestines, with slight indications of fluctuation beneath. No pain when pressure was made over kidneys or liver, or over the lumbar vertebræ. Nothing discovered to indicate an aneurismal tumor. Heart and lung sounds normal. It was believed to be a case of incipient cirrhosis, with a small quantity of fluid in the abdomen. Appetite fair; at times poor. Bowels inclined to be torpid. The pain, at no time very severe, was sufficient to require an anodyne at bed-time. July 1, patient's appetite has failed somewhat and he complains of the pain in the lumbar region, which extends along the sciatic nerve to the middle of the back of the thigh. External irritants, blisters, cups, dry and wet, seemed to give relief, but pain would return again, especially at night. Morphine and potassium bromide used at bed-time to procure sleep, the former when the pain was severe; though the latter in gr. xx. doses was generally found sufficient and less constipating. Patient sits up for an hour at a time, walks out upon the porch, and has taken one or two surreptitious walks as far as the barracks. Is a great smoker and regales himself with his pipe daily. There has been no swelling of the feet at any time, and no tumor visible, or distinctly palpable. During the past month the patient has failed in strength and wasted in flesh, though able to get up and dress himself with a little assistance. August 13, about 1 p. m., he rose from his bed, went to an ante-room, where he shaved himself and then returned. For some minutes he lay as if resting himself from his recent efforts, when suddenly he cried out for the doctor. I was with him in three minutes, but all efforts to restore him were without avail; he gasped a few times and then quietly expired. There was a sudden pallor came over his countenance, and he was pulseless, but no symptoms to account for the sudden change.

Autopsy, nineteen hours after death.—Body well nourished, cadaveric rigidity well marked, integument over abdominal cavity of an ashen blue—walls somewhat flattened. Incising abdomen and laying aside integument, small intestines, pale and creamy white, protruded themselves, filled with flatus. Turning out small and large intestines, left kidney was removed; weight $3\frac{1}{2}$ ounces; also, right kidney, weight 4 ounces, both healthy. Spleen small, weight 7 ounces, adherent to diaphragm, easily torn. Liver healthy, weight 3 pounds 4 ounces. About 1 ounce of smoky-colored serum in cavity of abdomen. Bladder empty. Fluctuation with protrusion of left thoracic cavity felt through diaphragm. Opening the latter it was found filled with blood more or less clotted, and the left lung crowded to the upper cavity, except at the left side, where it was prevented by strings of fibrin from an old adhesive inflammation. Lung tissue with the above exception healthy, as was also the right lung. Pericardium contained about one-half ounce of serum. Valves of the heart sufficient. About 100 ounces of blood and clots were removed from the left thoracic cavity. The origin of the effusion of blood was carefully traced, and found to proceed from a ragged opening in the diaphragm, 3 inches from the spine, through which it communicated with a sacculated aneurism of the abdominal aorta. The aneurismal sac was adherent also to the first, second, and third lumbar vertebræ, which it had necrosed along their left sides; the left transverse process of the first lumbar vertebra was broken, or so much necrosed that it gave away with slight pressure. The sac was adherent to the psoas muscle and held by adhesion to the vessels and lumbar muscles. It was large enough to hold 60 ounces of blood, and extended from the crest of the ilium to the diaphragm. The opening of communication between it and the abdominal aorta was an aperture $1\frac{1}{2}$ inches long by three-fourths of an inch wide, situated opposite the second lumbar vertebra. The lesion of the artery originally causing the aneurismal protrusion was to the left and posterior side of the vessel. The lining membrane of the sac was the same as the internal coat of the artery for the distance of an inch each way from the aperture; beyond it was composed of numerous layers of organized tissue, more or less readily separable, the whole mass inclosed by an adventitious membrane similar to the external coat of the artery. The thickness of the wall of the sac varied from one-half to three-fourths of an inch. The lower part of the artery with its divisions, the two common iliacs, appeared of normal size and perfectly healthy. The rupture occurred soon after the patient had assumed the horizontal position, at which time it was supposed that the blood burst forth from the sac and completely filled the left thoracic cavity, crowding the lung as far up as it would go, and so crowding the right lung cavity that death by asphyxia speedily followed. In the midst of the fibrous adhesions in the left costal wall of the thorax was found a No. 4 buckshot encysted. This was received about twelve years ago by the accidental discharge of a shot-gun. It is quite likely that the artery was injured by another shot at the same time and that the coats have been gradually distending and forming the sac, as the arteries appear to be healthy in the other parts of the body.

No. 6.—*Report of a case of aneurism of left subclavian, successfully treated by ligation of that artery. Subsequent death of the patient from aneurism of the abdominal aorta. By Surgs. C. B. White and D. L. Huntington, U. S. Army.*

The following excerpts from the monthly reports of the sick and wounded for 1875-'76, at Camp Independence, California, afford the preliminary history of this case: "Private Martin Cahill, Company D, Twelfth Infantry, taken January 3, 1875 (first time attention was called to it), with aneurism of the left subclavian artery, outer third, arising from injuries received by accident in 1874. Has been treated by pressure by means of a pad and adhesive straps with marked benefit." On the report for February, 1875, it is stated that the patient was "progressing favorably; pressure had to be temporarily intermitted, but when off for two or three days he felt the need of it, and it was renewed. The tumor is smaller and less troublesome. I (Surgeon White) doubt the practicability of entire relief without ligation. The pressure has an excellent effect in preparing for an operation, for the tumor would at first have been materially in the way."

On the report for March, 1875, appears the following note: "Private Martin Cahill, D, Twelfth Infantry, is progressing favorably. I (Surgeon White) fixed upon March 20 to ligate the artery, but at that time found the tumor so far diminished and the pain from pressure on the bronchial plexus of nerves so much relieved, that I considered it better to defer ligation. Manipulation of the tumor has regularly been made use of. When the pressure is first taken off the parts look and feel about normal; but shortly afterwards the blood fills in and a pulsating tumor appears. I suspect there is an aneurismal varix. Pressure by means of a pad applied by adhesive straps is constantly kept up."

Report for April, 1875: "Private Martin Cahill, D, Twelfth Infantry. Pressure and manipulation was kept up during the entire month, but with negative results. On the 30th instant, having opportunity to avail myself of skilled and experienced assistance from Dr. J. T. Wells, late of the U. S. Navy, I ligated the subclavian artery below the clavicle. I found the artery healthy at this point—virtually its middle third—and the pulsations of the tumor ceased entirely upon ligation. The aneurism was somewhat in my way and made the operation longer, but I found, as upon previous occasion, when I ligated this artery, branches of the brachial plexus of nerves very much in the way, and necessitating special precaution."

Report for May, 1875: "For some days after the operation the pulse rose so much that tinct. digitalis, grs. viii, had to be used three or four times daily. Two days after the operation a pulse could be felt in the left radial artery, and now, thirty days after the operation, the pulse is no stronger. The tumor has quite disappeared, and his (the patient's) health has markedly improved, though the arm is still rather weak and the thumb somewhat numb. The ligature of the artery, the only one used in the operation, is still retained. The traction made from time to time on it causes pain in the shoulder-blade."

Report for July, 1875: "The ligature of the subclavian artery in the case of Private Cahill came away July 11, 1875. There is pulsation of the brachial artery, but no pulse at the wrist. Returned to duty."

Report for March, 1876: "Discharged on surgeon's certificate of disability, March 1, 1876," certificate as follows: "General debility, the result of long service in the Department of Arizona. He suffered last year from an aneurism, the result of an accident at this post, which was cured, but the left arm remains disabled. His constitution has been broken down in the service. Disability total, and recommended for a pension."

The subsequent history is reported by Surg. D. L. Huntington, U. S. Army, as follows: "Martin Cahill, late private, Company F (D), Twelfth Infantry, Irish, thirty-two years of age, was admitted to the hospital at U. S. Soldiers' Home, Washington, D. C., April 12, 1876, on his arrival from Camp Independence, California, at which post he had been discharged for disability. Diagnosis on admission: Aneurism of the abdominal aorta, at or about the point of departure of superior mesenteric. The tumor was hard and well defined, the aneurismic bruit exceedingly distinct; the pulsation very visible through the emaciated abdominal parietes. Auscultation over precordial region showed some dilation of ventricular walls; impulse weak, following the systole of heart. There was a distinct repercussion of blood upon the left aortic valves—semi-lunar—giving a double wave-like pulse felt to the wrist. General condition anæmic, appetite bad; great emaciation and intense suffering. Bowels never moved except by enemata. Patient was at once placed in a recumbent position, tinct. ferri chloride, xxv drops three times daily, administered, and such anodynes as were required. Diet simple, but nutrient. No improvement was noted, and after intense suffering patient died suddenly, by rupture of the aneurismal sac, May 22, 1876."

Autopsy, made nine hours after death.—The several parts of interest were removed to the Army Medical Museum for examination. Specimen 6613 shows heart normal, aorta normal throughout; no atheroma anywhere. Left subclavian and axillary arteries

occluded between origins of superior intercostal and acromio thoracic arteries. This portion, which is 3 inches in length, also shows flattening and twisting, as also thickening, from old inflammatory endarteritis. Coeliac axis dilated into a sac about size of marble, which communicates with another of the superior mesenteric artery size of orange, joint sac leveled with laminated clot, sac wall adherent at lower side to small intestine, and ruptured under the peritoneal coat of the colon, the blood afterward bursting into the abdominal cavity. Hemorrhage quite large.

No. 7.—*Report of a case of aneurism of the left axillary treated by compression of the subclavian, and followed by an aneurism of the thoracic aorta. Patient discharged from service. Result unknown. By Asst. Surg. J. H. Patzki, U. S. Army, Fort Fetterman, Wyoming Territory.*

Private E. P. Girard, Company D, Fourteenth Infantry, age thirty-four. The patient stated in January, 1874, that for some months past he had suffered from pain and numbness in the left shoulder, extending up his neck and down his arm, which felt weak. These symptoms were rendered more severe by exertion and excitement, but were also subject to aggravation without perceptible cause. An examination, during the latter part of January, revealed the left radial pulse perceptibly weaker than the right, and in the left infra-clavicular space slight fullness with visible and expansive pulsation, a perceptible thrill and harsh bruit, these symptoms disappearing upon compression of the subclavian artery. Frequently repeated examinations confirm the diagnosis of a small aneurism of the first portion of the left axillary, and failed to disclose any lesion of the heart or thoracic vessels to which the attention was directed by the patient's complaints of pain in the cardiac and upper left thoracic region. The neuralgia, pain in neck and shoulder, and the swelling below the clavicle had slightly, and the rasping bruit considerably, increased by February 5, when the latter was easily perceived by non-professionals and by the patient himself, who had been practicing auscultation by connecting the ear with the tumor by means of a thin board. On that day digital compression of the subclavian over the first rib was instituted by means of a relay of nurses and convalescents. Total and rapid compression was contemplated, but was such only when exercised by myself, and approached rather the gradual intermitting character under the fingers of the men, as their experience and awkwardness made it difficult to regulate the degree of force required. The condition of the patient forbade administration of an anæsthetic, but the severe pain complained of in the præcordium and elbow was controlled by the liberal use of the hypodermic syringe until it became unendurable after five hours. The small tumor was then more firm and without pulsation; the arm was bandaged to the chest and compresses placed above and below the clavicle, and digitalis and ergot prescribed. The patient vomited on this and the following two days, and complained of considerable pain over seat of compression and in chest, but expressed himself easier in the shoulder and neck.

On the 9th, impulse and bruit below the left clavicle had returned. On the 21st, digital compression in the same manner as on the 5th was resumed for seven and a half hours, and on the following day for two hours. The pain was again very severe, but much relieved by frequent injections of morphine. After compression had continued for five hours the patient complained of a leaking, dripping sensation in his shoulder blade, which persisted for several days; expansive pulsation and bruit could not be perceived in the space below the left clavicle, which was the seat of a small, firm swelling, tender on even light pressure; vomiting continued for several days. The limb was bandaged and the same drugs administered as previously. March 6th, the symptoms of aneurism had not returned, the pain in the shoulder and arm was much relieved, but that in the chest had gradually become more severe; he was returned to light duty as nurse. Repeated examinations during this month revealed no change in the original seat of lesion except diminished size of tumor, but gave more and more ground to suspect lesion in the thoracic organs of circulation. He complained of pain radiating from the midsternum and a fixed pain between the shoulders, palpitation, vertigo, great nervousness, a sawing sensation in the chest, and night sweats. He began to lose flesh and looked haggard. March 26th, a distinct pulsation with a slight, inconstant bruit and impaired resonance was perceived over third and fourth costal cartilages close to the left margin of the sternum. These symptoms became, by the middle of April, gradually more distinct, a second heart was distinctly throbbing over the third costal cartilage, and the dullness along the sternum merged into the cardiac region. The diagnosis of aneurism of the arch being only too clear, the soldier was recommended for discharge, as he was anxious to join his family in Missouri. There is but little doubt in my mind that the development of the aortic lesion was hastened by the means adopted for the cure of the axillary aneurism. Although the latter appears solidified, still I am not satisfied as to the completeness of its cure, as the bruit is occasionally faintly perceptible over former seat, though this may be due to the tumor encroaching upon the lumen of the vessel.

No. 8.—*Report of a case of diffuse aneurism of one of the branches of the brachial artery near the elbow. Treated by excision of the sac. Result, cure. By Asst. Surg. A. C. Girard, U. S. Army, Boise Barracks, Idaho Territory.*

Edgar Kensler, age ten, arrived at post November 11, 1885, with his father, a sergeant in the subsistence department. My attention was drawn to a blueish swelling the size of a walnut above the elbow in the track of the brachial artery, which was said to have originated after a fracture of the humerus and was continually increasing. I diagnosed it as a diffuse aneurism of one of the branches of the brachial artery near the elbow, and advised excision, which was done November 21, 1885. A longitudinal incision about two and a half inches long exposed the sac, which was dissected from the subjacent tissues. The dissection was facilitated by Esmarch's bandage. Accidentally the sac was opened and its contents, fluid blood, escaped. There was no other hemorrhage, owing to the elastic constriction. The sac was excised, the interior surface showing on one side cicatrized tissue, on the other the entrance of a small artery. Strangely, on the removal of the tourniquet, no blood escaped. It had not healed by first intention, as hoped, neither were the catgut sutures absorbed.

No. 9.—*Report of a case of multiple aneurism of the external iliac and femoral artery. Treatment by pressure—partially successful. Recurrence of the disease and subsequent discharge of the patient from service. By Dr. J. F. Boughter, Acting Asst. Surg., U. S. Army, and Asst. Surg. Elliott Coues, U. S. Army, Fort Randall, Dakota Territory.*

Private James Riley, Company H, Twenty-second United States Infantry, age 24, admitted to hospital August 4, 1871, with a double aneurism of the right femoral artery—the first in the inguinal region, the size of a walnut, the second at junction of upper and middle third of the thigh, size of a hen's egg. The thigh was considerably swollen and painful from the pressure of the tumors on the veins and nerves. About three years before the patient had an attack of sub-acute rheumatism; at date his constitutional condition was reported good. August 4, 1871, digital compression for five hours was employed. August 5, the inferior tumor was diminished one-half, and at 6.30 p. m. pulsation had ceased. The inguinal aneurism much reduced and gave no pain or inconvenience. August 18, the lower aneurism was reported well, inguinal aneurism smaller and giving no inconvenience. Patient returned to duty August 18, 1871.

Subsequent history shows his readmission for aneurism April 16, 1872; his return to duty April 24, 1872; his admission for aneurism February 4, 1873; and discharge from service March 20, 1873. His certificate recites that "the patient was found incapable of performing the duties of a soldier because of aneurism of the external iliac and femoral artery; tumor is situated directly over the brim of the pelvis and has attained the size of a fowl's egg. There is another smaller dilation of the femoral artery lower down, the remains of a former aneurism which had partially disappeared under compression—a method inapplicable to the present case, having been tried and found impracticable. The condition of the artery is believed not to indicate the propriety of surgical interference. Disease believed to be of traumatic origin, result of direct injury." The final result of this case is not known.

No. 10.—*Report of a case of aneurism of the right femoral artery, treated by ligature of the external iliac. Result, cure. Subsequent death from a hemorrhage into the pericardium. By Dr. S. A. Freeman, Acting Asst. Surg., U. S. Army, Camp Wright, California.*

Private William Hedman, Company A, Twelfth United States Infantry, age thirty-one, German, was admitted to hospital November 21, 1871, with the following history: A few days before, while assisting in lifting the curb of a well, he felt that he had injured himself in the groin. There is no record of previous admission to sick report in this case. Examination showed on the right side a swelling the size of a common marble on line of Poupert's ligament, midway between the anterior superior spine of the ilium and the symphysis pubis. The tumor was decidedly aneurismal, and it increased rapidly in size and strength of pulsation up to the 17th of December, when it was about as large as a hen's egg. With this exception the patient's general health appeared to be good. On that date a ligation of the external iliac artery was performed, the wound being closed with three sutures and adhesive straps. A cure of the aneurism was effected, but it was followed by atrophy and imperfect use of the limb.

Seven months subsequently—July 7, 1872—while moving about outside of the hospital the patient suddenly expired. An autopsy was made one hour after death, revealing a clot that completely filled the pericardium. From what source the blood came was not ascertained, as the larger vessels showed no rupture and the walls of the heart were apparently firm and healthy.

No. 11.—*Report of a case of aneurism of the femoral artery, resulting in cure by spontaneous rupture of the sac and obliteration of the vessel.* By Surg. V. B. Hubbard, U. S. Army, Jackson Barracks, La.

Private James Horan, Company F, Third U. S. Infantry, was admitted to the post hospital Jackson Barracks, New Orleans, La., April 23, 1875. Patient was thirty-six years of age, of medium height, weight 185 pounds; his flesh was soft and flabby; he had been a soldier more than thirteen years, was of moderately temperate habits, and married. His health had usually been good, the only sickness from which he had suffered since enlistment being from gonorrhœa and syphilis, in 1862. From all the evidence that could be obtained, I was led to conclude that the syphilis was constitutional in its character. He remembered, when a boy, suffering from salivation from mercury administered by an aunt, the salivation being severe and protracted. His examination showed a tumor in the right groin below Poupart's ligament, about two and one-half inches in diameter, of a very symmetrical circular form, which tumor, upon examination, proved to be an aneurism of the superficial femoral artery. The superior border of the tumor, or sac, was distant from Poupart's ligament about one and one-half inches. The profunda femoris was given off at or near this superior border of the sac. The artery at this point was, as near as could be estimated by the touch, of its natural size. From this point to the ligament, and as deep into the pelvis as could be traced, the artery was three or four times its natural size; in fact, it was simply a prolongation of the aneurism into the pelvis as far as the external iliac artery could be followed, barring the constriction of the artery at the point of giving off of the profunda femoris above mentioned. The aneurismal thrill was very marked at the time the patient presented himself for examination, settling the diagnosis of the case beyond the possibility of a doubt. Before being admitted to hospital he was on detached duty in the quartermaster's department, having charge of the lighting and filling the lamps in use at the garrison, a duty which required little or no heavy lifting or hard work of any kind. He states that in the spring of 1870, while at Camp Supply, Ind. T., he had a pain in the bend of the right knee, popliteal region. He afterward noticed a small lump at the point indicated and presented himself to the post surgeon, who admitted him into hospital, where he remained about three weeks, when he was returned to duty. The nature of the disease or complaint I have not been able, satisfactorily, to ascertain.

He further states that in January, 1871, while loading ice at Fort Lyon, Colo., he lost his footing and fell, and a block of ice, weighing in the neighborhood of fifty pounds, which he was in the act of placing in the wagon, fell upon his right groin. No swelling followed at the time, but he had pain in the region at intervals, especially after rapid walking or active exercise. He reported to the post surgeon the following morning, but was not taken on sick report. He, however, felt more or less pain, never of great severity, from that time till about two weeks before he reported to the hospital at Jackson Barracks, as above stated. At this time he felt, in addition to the pain in the right groin, a numbness on the outer side of the right knee. After about a week he noticed a small tumor, hardly the size of a nutmeg, in the right groin, at the present seat of the aneurism. It grew rapidly, and in three or four days from the time he first noticed it he came on sick report. The man was immediately placed in bed and confined to low diet, chiefly of farinaceous foods. Compression by the tourniquet was made on the artery, over the brim of the pelvis, but the tourniquet being found impracticable, digital compression was substituted on the 23d, 24th and 25th of April, for periods varying in duration from two to four hours each. On the 26th compression was made for four hours, but was suspended on account of acute pain until the 29th, when compression was again tried and again suspended for the same reason. Compression was not again tried until after the rupture of the aneurism, May 24, the particulars of which will be given further on. At this point I wish to state that all of the compression made upon the artery had no appreciable effect upon the contents of the sac after the pressure was removed. Pulsation in the sac was entirely prevented during the compression. The patient was directed to lie as quiet as possible, the bowels kept freely open, the only medical treatment consisting of potass. iod., gr. xv ter die, and pot. brom., gr. lx or more at night, p. r. n. Symptoms of iodism developing themselves during this treatment, the iodide was discontinued temporarily and again resumed. The tumor continued to grow gradually until the period of its rupture, May 24, at 9.30 a. m. Previous to rupture the circumference of the thigh was $23\frac{1}{2}$ inches over the apex of the aneurism. After the rupture corresponding measurement was $22\frac{1}{2}$ inches. On the 26th the measurement was 22 inches; on the 27th, $21\frac{1}{2}$ inches; on the 30th, 21 inches; on June 3, 21 inches; June 7, 8, and 9 the measurement was 20 inches, after which no further measurements were made.

At the time of the rupture the patient was sitting up in bed, his knees bent, when suddenly he felt a sharp lancinating pain in the region of the aneurism, when he fell

back upon his pillow almost in a state of syncope; I was at his bedside in less than two minutes, when I found him in collapse. The patient was almost pulseless. The thigh in its whole extent, but more especially upon the outer side of the lower half, had become very tense and swollen with the effusion of blood, the tumor having collapsed and flattened very appreciably immediately after the rupture. Pressure was at once applied above the tumor over the brim of the pelvis for the purpose of preventing the flow of blood into the sac. This was kept up for about two hours, when it was found unnecessary, there being no disposition on the part of the blood to flow into and fill up the aneurismal sac. In fact, after the rupture of the artery, and before compression was applied, there was no pulsation in the tumor or in the artery above so far as it could be traced into the pelvic cavity. The patient was wrapped in warm flannels, bottles filled with hot water placed around the lower extremities, and stimulants very continuously administered with the view of bringing on reaction. He remained in a critical condition for two or three days, when he began slowly to recover. This accident, almost without an exception in the records of surgery, is a destructive process, causing inflammation, suppuration, and gangrene, when death is not instantly produced by the loss of blood. But in this case the conservative efforts of nature were very wonderful, and entirely successful. The leg remained swollen and tense from the effusion of blood, thus compressing the artery and preventing the danger of a recurrence of the hemorrhage until such danger had passed. After a lapse of some weeks, it became less in size than its fellow. This atrophy and the corresponding reduction in the temperature of the limb was due, of course, to the cutting off of the blood supply. The establishment of the collateral circulation through the medium of the branches of the internal iliac artery was very slow, but before the middle of December following, when the patient was returned to duty, it was sufficient to restore the limb to its natural size, symmetry, and temperature, though even then slight numbness was felt below the knee, a symptom of which the patient complained, more or less, during the whole treatment of his case. Patient was discharged from service at Fort Shaw, Mont., on surgeon's certificate of disability, for aneurism of the femoral and external iliac artery, September 25, 1881.

No. 12.—*Report of a case of aneurism of the anastomotica magna. Treated by ligature of the artery one inch from its origin. Subsequent ligature of the femoral. Result, death from an intercurrent pneumonia. By Surg. S. M. Horton, U. S. Army, Fort McKavett, Tex.*

Private Alexander Clark, Company M, Ninth U. S. Cavalry, colored, age twenty-seven, had been on sick report and treated in quarters, for thirty-four days prior to his admission to hospital, November 2, 1873. He suffered at first from rheumatism and subsequently a threatened abscess of the thigh. The swelling was tense, painful, slightly pulsating; and it gradually increased in size. Auscultation revealed no abnormal sounds, and no more pulsation was felt than might accompany any tumor resting upon so large an artery as the femoral. The exploring needle also failed to elicit its nature. By the 7th of November the tumor was 6 inches in its long axis and occupied the inner and lower third of the thigh, its inferior margin resting $3\frac{1}{2}$ inches above the inner condyle of the femur. The patient was placed under an anæsthetic composed of equal parts of chloroform and ether and a dissection was made down to the tumor, by an incision 8 inches in length, which followed a line running from the inner condyle to the middle of Poupart's ligament. It was then discovered to be a large aneurism of the anastomotica magna artery, commencing within one inch of its origin. The sac was opened and quickly cleared of all contained clot, and the artery was tied just above its entrance into the tumor. Considerable venous hemorrhage occurred, but it ceased within twenty-four hours. Sutures, adhesive straps, and compression were then applied. The patient bore the anæsthetic badly, and at one time sank very low. Under prompt remedies he revived, however, and the operation was completed. On the following day gangrene of the toes threatened, but by frequent rubbing of the limb with alcohol, wrapping the whole foot in cotton, and the application of heat, the danger was arrested. He was also threatened with pyæmia, and erysipelas attacking the thigh extended to the crest of the ilium, but under medical treatment it disappeared in three days. On the eighth day after the operation, during the removal of the dressings, a violent hemorrhage from the bottom of the wound occurred, which threatened to destroy life. The femoral artery was quickly secured, and on examination it was found that sloughing of the anastomotica magna had taken place, and that a part of the femoral had been eroded. The femoral was ligatured both above and below the opening, and the wound closed by adhesive strapping. Thorough drainage of the wound by means of the gum-elastic catheter and graduated pressure beneath the wound with dressings extending to the perineum were employed. No sutures were applied. Under the use of stimulants, nutritious diet, and proper medication the patient progressed as rapidly as could be reasonably expected. Both ligatures came away on the seventh day following the last operation and the pa-

tient was progressing favorably until the 23d of November, when pneumonia set in. Counter-irritants were applied to the chest, stimulants and nourishing diet freely given. An opening was made on the inner and upper portion of the thigh, which gave free exit to pus. The edges of the wound made by the operation apparently united, the discharge became less, and hopes were entertained of ultimate recovery. The patient gradually sank, however, and died on the morning of November 23, 1873.

A post mortem examination revealed the existence of inflammation throughout both lungs, the lower lobes being infiltrated with pus. The remaining portion was engorged with blood and the bronchial tubes filled with the characteristic sputum of pneumonia. Only a small portion of the apices was pervious to air. A number of the bronchial glands were enlarged, quite black, and easily broke down under pressure. The right side of the heart was filled with dark, clotted blood; the walls of the right ventricle were attenuated and its cavity enlarged; the walls of the right auricle were in some parts almost as thin as tissue paper, pale and flabby. They were intact when first examined, but were ruptured on attempting to remove the heart. The left side of the heart was normal. The edges of the wound of operation in the thigh were agglutinated to the depth of one-half inch, but were easily separated without cutting. A sinus was found running from a point above the knee-joint to the counter opening on the inner and upper portion of the thigh; it was about 12 inches long, had considerable capacity, and was partially filled with healthy looking pus.

No. 13.—*Report of a case of aneurism of the left popliteal artery. Treated by ligature of the femoral artery. Result, cure. Subsequent discharge from service. By Surg. Edwin Bently, U. S. Army, Russel Barracks, District of Columbia.*

Private Charles H. Broad, musician, Company E, Twelfth United States Infantry; age twenty-three; birth American; prior history of an attack of acute bronchitis that lasted about three weeks. Admitted to hospital January 12, 1868, suffering from a large pulsating tumor of the left popliteal space, which was beginning to be very painful. Up to February 10 various methods for compressing the artery were repeatedly tried without result. About this date he was put under the influence of chloroform and the femoral artery was ligated in the lower portion of Scarpa's triangle, the tumor gradually diminished and finally disappeared, and at the date of his discharge, May 10, 1868, his disability consisted mainly in a slight stiffness of the knee joint.

No. 14.—*Report of a case of aneurism of the left popliteal artery. Treated by compression with an iron ring. Result, cure. By Dr. W. E. Turner, acting assistant surgeon U. S. Army, Fort Wadsworth, Dakota.*

Private Joseph Hamm, Company D, Twentieth United States Infantry, age twenty-eight, was admitted to hospital April 17, 1873, with an aneurism of the left popliteal artery the size of a walnut. April 21 a flat oval iron ring was applied to the aneurism with light bandaging from the toes to the knee. The compression for the first two days was made hardest at the lower edge of the ring. On the third day, without removing the compress, the whole was rebandaged firmly and evenly at the knee. On the fifth day the compress was removed, the tumor much lessened. After progress favorable. Patient returned to duty May 7, 1873, and was discharged from service by expiration of enlistment September 2, 1874.

No. 15.—*Report of a case of aneurism of the left popliteal artery. Treatment by ligation of the superficial femoral, followed by gangrene of the leg and subsequent amputation. Recovery. Also, a note of resuscitation from impending death by anæsthetic narcosis. By Assist. Surg. F. C. Ainsworth, U. S. Army, Fort McIntosh, Tex.*

John Longard, Prussian, age forty, single, and by occupation a carpenter, appears October 15, 1884, complaining of a pain in his left knee, which he thinks is rheumatism. He has been actively employed as foreman of a railroad-bridge gang until two weeks ago, when his present trouble was first noticed. Examination reveals an aneurism in the left popliteal space of about one-half the size of a closed fist. Is positive that he had no trouble prior to two weeks ago, and that he has received no injury of any description. Has no heavy lifting to do, and does not remember having strained himself for months. Until his attention was called to the fact, was not aware that any tumor existed in the ham. Is 5 feet 8 inches in height, weighs 145 pounds, and appears to be a spare, though well-nourished and robust man. Never has had any serious sickness, or received any severe injury in his life, has never been a hard drinker, and denies venereal. Mother died of dropsy, otherwise family history is good. Careful examination reveals no cardiac lesion. His arteries all appear to be sound, save the popliteal and perhaps the tem-

poral, which is a little harder, more tortuous and prominent than normal. Urine 1023. acid; no albumen or casts. Patient is informed as to his condition and advised to submit himself to treatment if the pain and swelling increase.

October 21.—Presents himself in a very much worse condition than a week ago. The tumor has doubled in size and the pain is much more severe. Cannot straighten the leg, and can only walk with great difficulty.

October 23.—On account of the rapid growth of the aneurism and the intense pain attending it, together with the fact that patient did not bear well attempts made to use either compression or flexion in the treatment of his case, it was decided to at once ligate the superficial femoral, which was accordingly done. Ether was administered and very well borne. The artery was exposed in the usual manner and tied with No. 2 carbolized catgut at the edge of the sartorius; horse-hair drains were inserted, and incision closed with silver-wire sutures. Full antiseptic precautions were used preparatory to and during the operation, except the spray, which was replaced by the carbolized douche. The full Lister dressing was applied, and the whole limb was enveloped in cotton batting. The sheath of the vessel was unusually adherent and some little difficulty was experienced in passing the needle on that account, but the artery was secured without accident and all pulsation in the tumor below ceased immediately. Patient rallied well from the anæsthetic, but as soon as he had fairly regained consciousness complained of pain in the foot and ankle, which gradually became more severe in spite of the free administration of morphia hypodermically.

October 24.—Passed a very bad night, the pain in the foot and ankle being almost unbearable. The foot and ankle are cold, and the instep and external surface of the foot are livid. Gentle frictions ordered at intervals during the day, and hot bottles to surround the extremity outside the cotton swathing, the thickness of which is increased.

October 27.—Gangrene of foot has slowly but surely developed since last date. Pain ceased two days after operation. The dressings were removed from the thigh on the 27th, and union was found to be complete throughout except at the points of emergence of the drains. The drains were withdrawn and the wound dressed with iodoform.

October 30.—Gangrene slowly extending. Toes are black, hard, and dry. Foot black or livid to level of mæleoli. Dressing removed from wound and union found to be perfect.

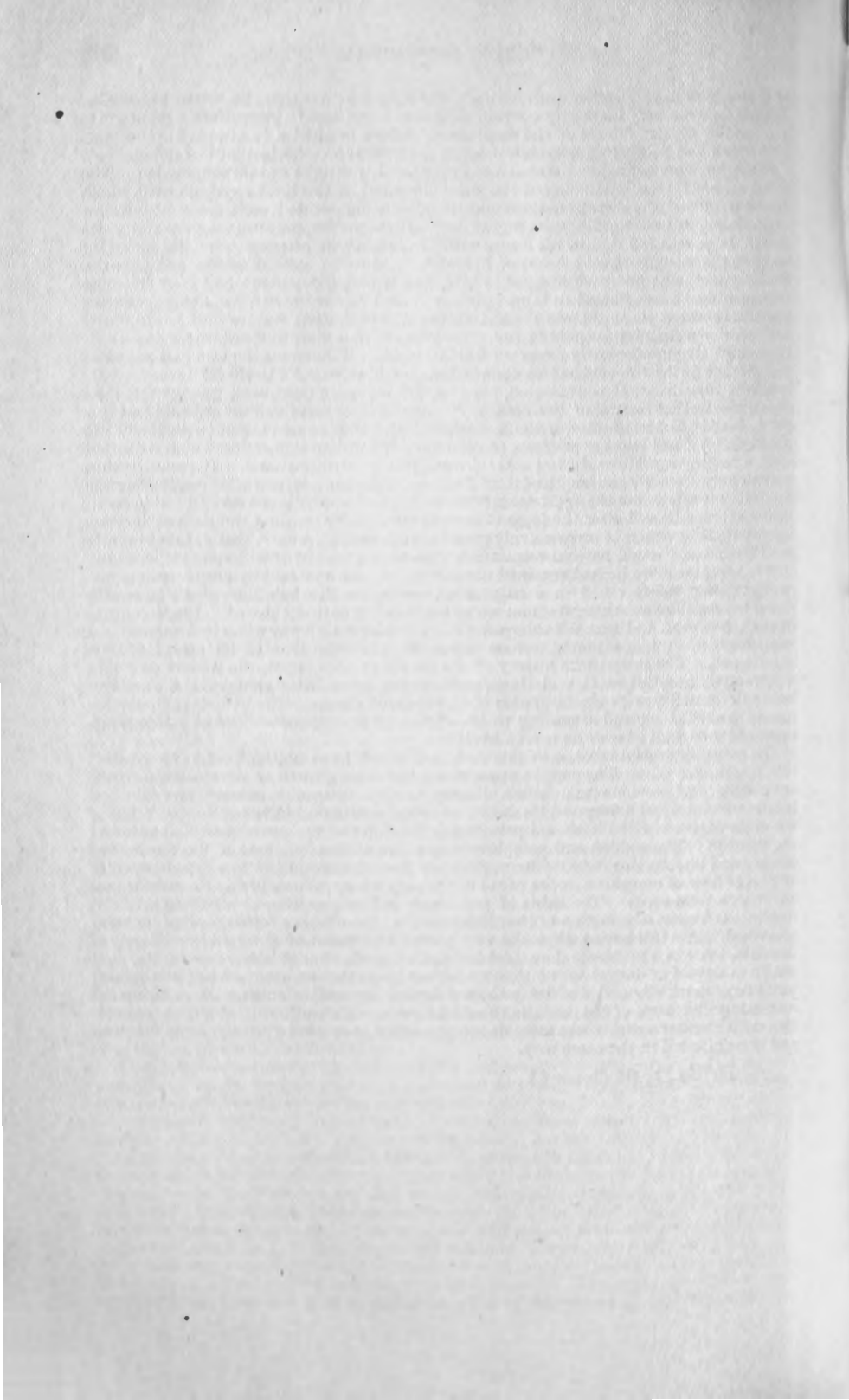
November 18.—Since last record, patient has felt very well, suffered no pain, slept well, and eaten well. The gangrenous process had slowly developed and extended. The whole foot was shriveled, dry, and hard. The ankle and leg for 2 inches above the mæleoli was livid. No distinct line of demarcation had formed, but it was decided to amputate, without further delay, sufficiently high to secure sound tissue, and sufficiently low to give a good stump, *i. e.*, at the junction of the upper and middle thirds of the leg. The patient was ordered a hypodermic of m. x of Magendie's solution, and ten minutes afterward ether was administered. He took the anæsthetic very badly, struggled a good deal at first, and later the limbs were rigid and trembled violently. In forty-five minutes, after using 6 ounces of ether, anæsthesia was complete, and I proceeded to operate. The Esmarch bandage was used, instruments were soaked in a 5 per cent. carbolic solution, hands cleansed in a 1-1000 bichloride of mercury solution, the skin of the leg and thigh scrubbed with soap, then with alcohol and turpentine, and afterward with the bichloride solution. The latter solution was used profusely as a douche during the whole operation in place of the spray. The sponges were new and had been cleansed in hot water, and soaked for twenty-four hours in a 1-500 bichloride solution. All bleeding points were secured with carbolized catgut, flaps were united with silver wire, rubber drainage tube inserted, iodoform applied freely to line of incision, and the stump dressed with bichloride gauze and salicylated jute. Some delay in closing the wound was caused by profuse venous oozing—more than is commonly met with even after the use of the Esmarch bandage.

When the dressing was completed the pulse and respiration were good. The patient was taken from the operating table on a stretcher to an adjoining room and put to bed. *In a moment afterward it was noticed that respiration had ceased.* All the ordinary means of resuscitation failing, I immediately instituted artificial respiration by Howard's method, which was kept up continuously by myself, Assistant Surgeon Edie, and Dr. J. P. Arthur, of Laredo, who were fortunately present to relieve me when exhausted, for over one hour before the first respiratory effort was made on the part of the patient. The pulse from the very first was full, strong, and regular, becoming small and rapid only when the efforts at artificial respiration were for a time intermitted. The extremities were warm, the face had a good color and expression; there was not the slightest evidence of shock, and, in fact, the patient would have been considered to be in a perfectly satisfactory condition except for the fact that he would not breathe. There seemed to be lacking only the impulse from the respiratory centers. The throat and chest were perfectly clear, there had been no undue secretion of mucus and no evidence whatever

of obstruction to respiration until, without the slightest warning, he ceased to breathe. The pupils were very markedly contracted, so much so that it immediately occurred to me that this sudden failure of the respiratory centers might be due in part to the morphia which had been given hypodermically just before the etherization was commenced.

Subsequent investigation has convinced me that I was right in this supposition. The acting steward, who administered the morphia, used at the time a syringe with which he was not familiar. The graduation on the piston represented each *three* minims instead of *one*, as in the ordinary syringes, and, although the steward very naturally denied it, I am satisfied that in his hurry and excitement in preparing for the operation he gave the patient *thirty minims* of Magendie's solution instead of ten minims, the quantity which he had been ordered to give, and which the patient had been for some time previously accustomed to take. At any rate, I at once gave a hypodermic of atropia, and repeated it at intervals until voluntary respiration was resumed. Digitalis and whisky were administered in the same way, with a view to forestalling heart failure, which was momentarily expected to take place. How much the last two remedies contributed to the recovery which ensued I am unable to say, for the heart never flagged, and from first to last the circulation, even in the remote extremities, was perfect, thus giving rise to that feature of the case which at the time was the most striking and singular, that is, the good color, warmth, and normal feel of the skin, and particularly the placid and natural facial expression, the livid and death-like appearance which is so often seen in respiratory failure during ether narcosis being entirely absent. For considerably over an hour (exactly the length of time it is impossible to state) artificial respiration was carried on, until at last the application of ammonia to the nostrils provoked a feeble respiratory effort, followed after the lapse of several minutes by another, and then at decreasing intervals by others of progressively greater depth and force, until finally, to my infinite gratification and relief, natural respiration was re-established and the patient was safe. In five minutes more he had regained consciousness and was asking questions in a perfectly rational manner and in a natural tone of voice, the habitude which generally characterizes the awakening from an anæsthetic being entirely absent. He was quite drowsy, however, and soon fell asleep and slept for about an hour, when he awoke bright and cheerful, and apparently nowise worse for the operation or its attendant circumstances. The subsequent history of the case was uneventful, the wound pursuing a thoroughly aseptic course, and though there was some little sloughing of the flaps, healing eventually with the formation of an excellent stump. The patient is now wearing an artificial leg and attending to his duties as foreman of a railroad bridge gang, apparently as well as ever he was in his life.

The points of special interest in this case, and which have induced me to record it at this length, are these: The sudden appearance and rapid growth of the aneurism, without a history of previous traumatism, disease, or other assignable cause. The adhesion between the femoral artery and its sheath as being possibly an index of the condition of the other arteries of the limb and pointing to the cause of the gangrene which followed the ligation. The sudden and complete suspension of the functions of the respiratory centers and its long duration. The probability that the administration hypodermically of a large dose of morphia was the cause of the respiratory failure during the subsequent anæsthesia from ether. The value of persistent and long-continued efforts at artificial respiration in case of cessation of that function from the effects of ether, opium, or both combined. The intimation that the very prevalent custom of giving a hypodermic of morphia, even in a moderate dose, just before the production of ether anæsthesia, may not be so devoid of danger as is currently believed, and that an agent which, like opium, tends most markedly and decidedly toward depressing and inhibiting the co-ordinated respiratory functions of the medulla should be given with caution, if at all, in conjunction with another agent whose most dangerous action is exerted upon the same function and is manifested in the same way.



REPORT OF THE PAYMASTER-GENERAL.



REPORT

OF

THE PAYMASTER-GENERAL.

PAYMASTER-GENERAL'S OFFICE,
Washington, D. C., October 11, 1886.

SIR: I have the honor to submit my report of the transactions of the Pay Department of the Army for the year ending June 30, 1886.

The tabular statements appended show in detail the fiscal operations of the Department for that year, summarily stated as follows:

RECEIPTS AND DISBURSEMENTS DURING THE FISCAL YEAR ENDING JUNE 30, 1886.

Balance in hands of paymasters July 1, 1885.....	\$1,465,139 76
Amount received from the Treasury.....	12,966,000 00
Amount received from soldiers' deposits.....	469,031 55
Amount received from paymasters' collections.....	274,969 36

Total to be accounted for.....	15,175,140 67
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Accounted for as follows:

Disbursements:

To the Army.....	\$12,912,700 01
To the Military Academy.....	208,604 70
To the Signal Service.....	230,947 89
To the volunteers (on Treasury certificates).....	92,480 55
Total.....	13,444,733 15
Surplus funds deposited in Treasury.....	202,148 53
Paymasters collections deposited in Treasury.....	274,969 36
Balance in hands of paymasters' June 30, 1886.....	1,253,289 63

Total accounted for	15,175,140 67
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So far as this office has been advised there has been no delinquency in the prompt payment of the troops, and I take pleasure in commending the officers of the Department for the diligence displayed in the discharge of all duties required of them, especially the officers on duty in the Department of Arizona and the District of New Mexico. Notwithstanding the fact that the troops in the recent Indian campaign on the Mexican border were scattered into numerous camps, posted distant from all usual lines of travel and reached only after days of dangerous and fatiguing travel, the duty of paying these troops was promptly performed.

Of the total amount disbursed to the Army \$5,273,448.90 was disbursed in the field, the greater portion of it in small and broken amounts over the pay-table on the bimonthly muster and pay rolls. To make these disbursements, as will appear from the statement herewith, the officers traveled 231,010 miles; of this distance, 42,292 miles were by

stage and ambulance. The disbursements, aggregating \$13,444,733.15, were made without loss to the Government.

There has been no change since my last report in the number of officers in this Department.

The available officers are on duty as follows:

Washington, D. C	2
Maj. I. O. Dewey, Paymaster-General's Office; Maj. W. F. Tucker, jr., post paymaster.	
Division of the Atlantic	9
Col. Daniel McClure, assistant paymaster-general, Governor's Island, New York Harbor; Maj. A. S. Towar, paymaster, Detroit, Mich.; Maj. J. W. Wham, paymaster, New York City; Maj. C. C. Sniffen, paymaster, New York City; Maj. G. W. Baird, paymaster, Boston, Mass.; Maj. F. S. Dodge, paymaster, New York City; Maj. Charles McClure, paymaster, Newport Barracks, Ky.; Maj. W. H. Comegys, paymaster, Atlanta, Ga.; Maj. Henry Clayton, paymaster, Buffalo, N. Y.	
Division of the Pacific	1
Lieut. Col. Rodney Smith, deputy paymaster-general, San Francisco.	
Department of California	4
Maj. C. J. Sprague, paymaster, Presidio of San Francisco; Maj. Asa B. Carey, paymaster, Presidio of San Francisco; Maj. D. R. Larned, paymaster, San Francisco; Maj. J. S. Witcher, paymaster, San Francisco.	
Department of Arizona	5
Maj. G. E. Glenn, paymaster, Whipple Barracks, Arizona; Maj. F. M. Coxe, paymaster, Tucson, Ariz.; Maj. W. M. Maynadier, paymaster, Santa Fé, N. Mex.; Maj. G. F. Robinson, paymaster, El Paso, Tex.; Maj. George R. Smith, paymaster, Tucson, Ariz.	
Department of the Columbia	3
Maj. J. P. Canby, paymaster, Portland, Oreg.; Maj. D. C. Poole, paymaster, Vancouver Barracks, Wash.; Maj. J. B. Keefer, paymaster, Walla Walla, Wash.	
Division of the Missouri	1
Maj. William Smith, paymaster, Chicago, Ill.	
Department of the Missouri	4
Lieut. Col. W. A. Rucker, deputy paymaster-general, Fort Leavenworth, Kans.; Maj. G. W. Candee, paymaster, Saint Louis, Mo.; Maj. Alex. Sharp, paymaster, Leavenworth, Kans.; Maj. J. P. Baker, paymaster, Leavenworth, Kans.	
Department of Dakota	6
Lieut. Col. W. H. Johnston, deputy paymaster-general, Fort Snelling, Minn.; Maj. A. E. Bates, paymaster, Saint Paul, Minn.; Maj. W. H. Eckels, paymaster, Saint Paul, Minn.; Maj. J. E. Blaine, paymaster, Helena, Mont.; Maj. J. R. Roche, paymaster, Sioux City, Iowa.; Maj. C. H. Whipple, paymaster, Fort Keogh, Mont.	
Department of Texas	4
Maj. W. R. Gibson, paymaster, San Antonio, Tex.; Maj. William Arthur, paymaster, San Antonio, Tex.; Maj. D. N. Bash, paymaster, San Antonio, Tex.; Maj. J. C. Muhlenberg, paymaster, San Antonio, Tex.	
Department of the Platte	4
Maj. C. M. Terrell, paymaster, Omaha, Nebr.; Maj. T. H. Stanton, paymaster, Salt Lake City, Utah.; Maj. C. I. Wilson, paymaster, Omaha, Nebr.; Maj. W. E. Creary, paymaster, Cheyenne Depot, Wyo.	
Total	43

The following-named officers are not available:

Col. G. L. Febiger, assistant paymaster-general, now on leave, at the expiration of which he will proceed to his home and await retirement, under date of December 8, 1886.

Maj. H. B. Reese, paymaster, awaiting orders at his own request, since March 22, 1885.

Maj. P. P. G. Hall, paymaster; on sick leave since April 21, 1884.

Maj. J. P. Willard, paymaster, awaiting orders at his own request, since September 24, 1885.

Maj. H. G. Thomas, paymaster, on sick leave since March 7, 1884.

The four last-named officers have applied to be retired under the following proviso of the act of July 5, 1884: "That hereafter any paymaster of the rank of major, who has served twenty years in the United States Army as a commissioned officer, may, upon his own application or by direction of the President, be placed upon the retired list of the Army." As no vacancies will be created by the retirement of these officers I recommend that their requests be granted.

SOLDIERS' DEPOSITS.

The deposit system authorized by the act of May 15, 1872, seems to be growing in favor with the enlisted men of the Army.

The number of deposits made during the last fiscal year was 7,261, amounting to \$469,031.55, showing an increase over the previous year of 228 in number and of \$41,413.59 in amount. The number of new accounts opened with depositors during the year was 1,557, as against 1,411 in the previous year.

Since the act went into effect, July 1, 1872, to the close of the last fiscal year, the total amount of deposits was \$5,506,543.12, and of the repayments \$4,426,992.19, leaving a balance of \$1,079,551.23 to the credit of depositors.

This certainly is a very creditable showing for the enlisted men of the Army.

STOPPAGES.

Under the regulations and the law (sec. 1766, Rev. Stats.) prohibiting payment to an officer in arrears to the United States, this office is charged with the collection of all stoppages and arrears reported against officers in service.

During the fiscal year ending June 30, 1886, there were four hundred and ten stoppages made against officers, amounting to \$22,133.37, as follows:

By request of Quartermaster-General.....	\$1,702 87
By request of Commissary-General.....	434 07
By request of Chief of Ordnance.....	580 28
By request of accounting officers of Treasury (sec. 1766, R. S.).....	10,797 18
Court-martial fines.....	2,496 78
Stoppages arising in paymasters' accounts.....	6,122 19
	<hr/>
	22,133 37
Of this amount there was collected.....	12,670 50
Withdrawn.....	6,251 95
	<hr/>
	18,922 45
Balance remaining on the books June 30, 1886.....	3,210 92

PAYMASTERS' CHECKS.

I would recommend that the necessary legislation be asked to direct that the checks of the disbursing officers of this Department be forwarded, after payment, at the end of each month, by the Treasurer, the several assistant treasurers, and United States depositories, on whom they are drawn, through this office for file with the vouchers received therefor by the paymasters. The bringing together of the voucher and the evidence of its payment, when paid by check, would complete the record in the hands of the accounting officers that the payment had been made to the party entitled to the same. Such a regulation would also speedily develop any instance of the issue of a check against an official credit for a purpose not authorized by law.

PAYMASTER-GENERAL'S OFFICE.

The reports from the several divisions of the office show as follows:

Accounts rendered by paymasters, on hand July 1, 1885.....	76
Accounts received to June 30, 1886.....	531
Total	607
Accounts sent to Second Auditor.....	557
Accounts on hand June 30, 1886	50
Payments recorded.....	58,892
Vouchers examined.....	49,674
Letters received and entered.....	9,053
Letters written.....	4,640
Indorsements written.....	2,839
In the Division of Volunteer Records the number of cases on hand for report to the Adjutant-General and Second Auditor, July 1, 1885, was	408
Received to June 30, 1886.....	31,899
Total	32,307
Cases answered	27,635
Cases on hand June 30, 1886	4,612

The number of cases on hand September 30, was 3,208, a reduction of 1,404 since the close of the fiscal year.

The large increase in the number of cases remaining on hand arises from recent legislation opening a new class of claims not anticipated when I recommended in my last estimates a reduction of the clerical force of the office. While some delay will arise in disposing of cases, it is not believed that it will warrant the employment of an additional number of clerks.

I invite attention to the appended report of payments made to colored soldiers by Maj. I. O. Dewey, paymaster, United States Army, in charge of payment of bounty and arrears of pay on Treasury certificates.

I am, sir, very respectfully, your obedient servant,

WM. B. ROCHESTER,
Paymaster-General, U. S. A.

The SECRETARY OF WAR.

Statement, by appropriations, showing the amount in the hands of officers of the Pay Department July 1, 1885; the amount received by them from the Treasury and all other sources during the fiscal year ending June 30, 1886, also the amount accounted for by vouchers of expenditures, by deposits and replacements in the Treasury, and the balances in the hands of officers of the Pay Department June 30, 1886.

Appropriations.	Balances in hands of paymasters July 1, 1885.	Received from Treasury during fiscal year ending June 30, 1886.	Received from soldiers' deposits.	Received from paymasters' collections.	Credit transfers.	Total to be accounted for.	Unexpended balances deposited in the Treasury.	Paymasters' collections deposited in the Treasury.	Debit transfers.	Disbursements.	Balances in hands of paymasters June 30, 1886.	Total accounted for.
Pay, &c., of the Army, 1886.		\$12,405,983 12	\$469,031 55			\$12,875,014 67	\$12 72		\$10,366 69	\$11,688,160 01	\$1,176,475 25	\$12,875,014 67
Pay, Mil. Academy, 1886		213,000 00				213,000 00				182,062 00	30,938 00	213,000 00
Signal Service pay, 1886		220,000 00			\$1,143 25	221,143 25				220,261 35	881 90	221,143 25
Pay, &c., of the Army, 1885	\$1,249,118 18	32,500 00			9,471 52	1,291,089 70	90,466 01			1,180,684 41	19,939 28	1,291,089 70
Pay, Mil. Academy, 1885	16,337 24	12,000 00			21 00	28,357 24	1,814 54			26,542 70		28,357 24
Signal Service pay, 1885	2 27	16,016 88				16,019 15	4,466 56		247 93	10,686 54	618 12	16,019 15
Pay, &c., of the Army, 1884	64,495 77	5,000 00				69,495 77	42,194 76		21 15	21,373 66	5,006 20	69,495 77
Signal Service pay, 1884	358 86					358 86	358 86					358 86
Pay, &c., of the Army, 1883	50,570 65					50,570 65	37,872 40			12,698 25		50,570 65
Pay of the Army, 1882	3,912 31					3,912 31	3,739 62			172 69		3,912 31
Pay, Army, 1881, prior yrs.	30,436 62					30,436 62	20,798 93			9,610 99	26 70	30,436 62
Bty. act. July 28, 1866-1880 and prior years	26,537 74					26,537 74	17 50			25,805 24	715 00	26,537 74
Bty. vols., their widows &c., 1871, and prior years	8,830 92					8,830 92	1 29			5,172 70	3,656 93	8,830 92
Bty. 15th and 16th Mo. Cav	6,059 34					6,059 34				2,543 34	3,516 00	6,059 34
Pay of 2 and 3 year vols., 1871, and prior years	3,593 20					3,593 20	1 07			2,831 45	760 60	3,593 20
Ex. pay to officers and men in Mexican war	4,225 02	42,000 00				46,225 02				42,179 40	3,745 53	46,225 02
Pay, vols. Mex. war, 1871, and prior years	89 59					89 59				53 09	36 50	89 59
Three mos. pay proper, act July 3, 1884	573 05	18,500 00				19,073 05				12,999 51	6,073 54	19,073 05
Col'n. payment of bounty, &c., 1865		1,000 00				1,000 00	404 27			595 73		1,000 00
Paymasters' collections				\$274,969 36		274,969 36		\$274,969 36				274,969 36
Total	1,465,139 76	12,966,000 00	469,031 55	274,969 36	10,637 77	15,185,776 44	202,148 58	274,969 36	10,635 77	13,444,733 15	1,253,289 63	15,185,776 44

Statement, by appropriations, of approved and suspended disbursements in paymasters' accounts rendered during the fiscal year ending June 30, 1886, showing also the balance of suspensions remaining June 30, 1885, amount removed during the year, and the balance remaining June 30, 1886.

Titles of appropriations.	Disbursements.			Suspensions.			
	Total.	Approved.	Suspended.	Amount of suspensions remaining on books June 30, 1885.	Total suspensions.	Amount of suspension removed during fiscal year ending June 30, 1886.	Amount of suspensions remaining on books June 30, 1886.
Pay, &c., of the Army, 1886	\$11,688,455 32	\$11,683,133 46	\$5,321 86		\$5,321 86	\$2,425 28	\$2,896 58
Signal Service pay, 1886	219,118 10	219,095 19	22 91		22 91	10 91	12 00
Pay of the Military Academy, 1886	182,062 00	182,062 00					
Pay, &c., of the Army, 1885	1,181,574 56	1,181,036 47	538 09	\$3,501 22	4,039 31	3,683 94	355 37
Signal Service pay, 1885	10,686 54	10,686 54		11 01	11 01	1 00	10 01
Pay of the Military Academy, 1885	26,521 70	26,521 70					
Pay, &c., of the Army, 1884	21,352 45	21,352 45		527 71	527 71	104 85	422 86
Signal Service pay, 1884				5 15	5 15		5 15
Pay, &c., of the Army, 1883, and prior years	12,698 25	12,698 25		12,916 34	12,916 34	2,043 37	10,872 97
Pay of the Army, 1883	172 69	172 69					
Pay, &c., of the Army, 1881, and prior years	9,610 99	9,610 99					
Pay of volunteers (Mexican war), 1871, and prior years	53 09	53 09					
Bounty to Fifteenth and Sixteenth Missouri cavalry volunteers	2,543 34	2,543 34					
Bounty to volunteers, their widows and their legal heirs, 1871 and prior years	5,172 70	5,172 70					
Pay of 2 and 8 years' volunteers, 1871 and prior years	2,831 45	2,831 45					
Bounty, act of July 28, 1886, 1880, and prior years	25,805 24	25,805 24					
Extra pay to officers and men who served in Mexican war	42,479 49	42,479 49					
Three months' pay proper, act July 3, 1884	12,999 51	12,999 51					
Collection and payment of bounty, &c., 1886	595 73	595 73					
Total	13,444,733 15	13,438,850 29	5,882 86	16,961 43	22,844 29	8,269 35	14,574 94

Statement showing the balance in the hands of each of the disbursing officers of the Pay Department on the 1st of July, 1885; the amount remitted to each from the Treasury, or turned over by other agents, during the fiscal year ending June 30, 1886; the amount accounted for by accounts and vouchers of expenditures or by transfers or replacements in the Treasury, and the balance remaining in the hands of paymasters, to be accounted for in the next fiscal year.

Rank and name.	Balance in hands of each paymaster July 1, 1885.	Remitted from Treasury in the year ending June 30, 1886.	Received from other paymasters.	Soldiers' deposits.	Army paymasters' collections.	Total received and to be accounted for.	Surplus funds re-placed in the Treasury.	Army paymasters' collections deposited.	Expenditures.	Transferred to other paymasters.	Balance in hands of each paymaster June 30, 1886.	Total accounted for.
COLONEL AND ASSISTANT PAYMASTER-GENERAL.												
McClure, Daniel	\$56,178 12	\$2,575,500 00	\$433,213 66	\$3,096 39	\$1,311 89	\$3,069,300 06	\$4,824 10	\$1,311 89	\$73,821 66	\$2,931,256 21	\$58,086 20	\$3,069,300 06
Febiger, George L. ....	.....	432,000 00	80,509 66	2,423 05	600 96	515,533 67	.....	600 96	89,346 27	413,778 07	11,808 37	515,533 67
LIEUTENANT-COLONEL AND DEPUTY PAYMASTER-GENERAL.												
Smith, Rodney	10,442 76	728,000 00	24,165 67	5,101 00	4,058 92	771,768 35	734 25	4,058 92	252,140 98	496,803 64	18,030 56	771,768 35
Racker, W. A.	10,000 00	1,593,000 00	162,470 82	10,390 00	1,972 00	1,777,832 82	20,979 88	1,972 00	333,001 25	1,347,537 03	74,342 66	1,777,832 82
Johnston, W. H. ....	.....	1,394,000 00	143,593 23	1,440 09	3,782 57	1,542,815 89	41,296 62	3,782 57	221,398 84	1,237,774 85	38,563 01	1,542,815 89
MAJOR AND PAYMASTER.												
Gibson, W. R.	96,738 60	645,000 00	148,289 39	4,633 00	4,360 31	899,016 30	10,350 54	4,360 31	357,176 34	462,733 60	64,386 51	899,016 30
Sprague, Charles J.	36,140 10	220,000 00	380,450 80	10,077 00	4,523 56	651,191 46	418 72	4,523 56	250,495 35	385,986 99	9,766 84	651,191 46
Reese, H. B. ....	.....	.....	.....	.....	10 27	10 27	.....	10 27	.....	.....	10 27	.....
Smith, William.	118,461 07	125,000 00	251,062 81	7,725 65	4,728 07	507,577 60	3,030 82	4,728 07	270,566 34	221,130 76	8,121 61	507,577 60
Terrell, C. M.	53,989 32	1,110,000 00	31,700 00	12,137 75	6,274 76	1,214,101 83	.....	6,274 76	375,817 51	776,046 98	55,471 48	1,214,101 83
Stanton, T. H.	34,641 57	120,000 00	194,400 00	18,120 50	10,119 15	377,281 22	491 10	10,119 15	337,895 24	1,700 00	27,566 83	377,281 22
Glenn, George E.	17,274 15	708,000 00	109,694 31	7,824 00	4,402 83	817,195 29	.....	4,402 83	171,105 77	644,436 45	26,188 55	817,195 29
Canby, J. P.	12,629 61	.....	206,800 00	12,061 75	6,282 52	237,773 88	1,061 69	6,282 52	213,190 50	2,129 52	16,162 34	237,773 88
Candee, George W.	8,823 08	230,000 00	50,704 38	4,260 70	686 97	299,634 43	.....	686 97	229,819 45	33,545 31	35,582 70	299,634 43
Dewey, I. O.	19,033 81	235,500 00	137,163 22	4,040 26	1,401 10	397,138 89	7,835 08	1,401 10	222,634 82	43,585 84	121,732 05	397,138 89
Carey, A. B.	106,902 98	68,000 00	182,678 17	4,260 00	950 52	422,797 67	90,000 00	950 52	134,227 87	189,539 41	8,073 87	422,797 67
Willard, J. P.	22,071 47	.....	23,100 00	270 00	1,157 16	46,598 63	.....	1,157 16	34,039 67	11,401 80	.....	46,598 63
Coxe, F. M.	32,416 07	.....	322,494 32	16,563 10	7,149 73	378,623 22	.....	7,149 73	327,370 44	9,593 90	34,509 15	378,623 22
Bates, A. E.	36,998 95	1,139,000 00	190,276 27	5,189 86	9,804 47	1,381,269 55	4,825 42	9,804 47	1,062,091 10	249,343 80	55,204 76	1,381,269 55
Wilson, C. I.	11,493 28	.....	310,146 98	10,231 00	8,546 29	340,417 55	.....	8,546 29	237,637 18	67,000 00	27,234 08	340,417 55
Eckels, W. H. ....	.....	162,000 00	274,805 02	33,359 93	8,461 68	487,122 23	514 25	8,461 68	411,651 05	8,299 01	49,700 64	487,122 23
Blaine, J. E.	6,677 32	462,000 00	608,997 51	1,395 00	5,426 12	1,084,495 95	.....	5,426 12	296,146 85	782,922 98	.....	1,084,495 95
Roche, James R.	29,834 67	65,000 00	379,145 06	8,908 42	4,234 08	487,122 23	17 00	4,234 08	279,595 60	104,262 64	9,012 91	487,122 23
Towar, A. S.	28,302 22	66,000 00	248,114 30	5,875 90	5,094 31	353,386 83	.....	5,094 31	320,637 60	10,524 83	17,130 09	353,386 83

Statement showing the balance in the hands of the disbursing officers of the Pay Department on the 1st of July, 1885, &c.—Continued.

Rank and name.	Balance in hands of each paymaster July 1, 1885.	Remitted from Treasury in the year ending June 30, 1886.	Received from other paymasters.	Soldiers' deposits.	Army paymasters' collections.	Total received and to be accounted for.	Surplus funds re-placed in the Treasury.	Army paymasters' collections deposited.	Expenditures.	Transferred to other paymasters.	Balance in hands of each paymaster June 30, 1886.	Total accounted for.
MAJOR AND PAYMASTER—continued.												
Maynadier, W. M.	\$19,875 89	\$180,000 00	\$299,663 22	\$19,032 12	\$21,089 01	\$539,659 74	\$1,000 00	\$21,080 01	\$442,565 59	\$56,157 34	\$18,847 80	\$539,659 74
Arthur, William	28,132 40	.....	779,199 88	6,128 60	5,608 60	819,069 48	.....	5,608 60	771,448 76	42,012 12	.....	819,069 48
Sharp, Alexander	89,220 84	.....	363,732 64	15,986 00	10,660 77	429,599 75	.....	10,660 77	356,660 85	39,180 46	23,097 67	429,599 75
Keefer, J. B.	20,040 49	60,000 00	148,996 64	5,955 00	11,430 83	246,422 96	.....	11,430 83	210,577 02	2,098 13	22,816 93	246,422 96
Wham, J. W.	21,834 09	.....	797,052 58	2,480 00	6,841 79	827,708 46	.....	6,841 79	542,779 46	234,000 00	44,087 21	827,708 46
Sniffen, C. C.	18,543 62	.....	307,528 75	5,670 00	7,762 77	339,505 34	.....	7,762 77	265,980 89	26,812 75	38,948 93	339,505 34
Baird, G. W.	34,547 39	.....	353,610 18	13,370 90	7,137 54	419,666 10	.....	7,137 54	398,480 42	11,812 39	2,255 75	419,666 10
Larned, D. R.	13,178 02	.....	95,000 00	5,935 00	2,761 92	116,924 94	.....	2,761 92	87,736 99	16,568 93	9,857 10	116,924 94
Robinson, George F.	85,089 09	35,000 00	162,660 53	10,469 73	6,216 65	250,336 00	.....	6,216 65	203,896 94	40,222 41	.....	250,336 00
Creary, W. E.	5,141 88	.....	279,336 17	11,800 00	8,273 77	304,551 32	35	8,273 77	264,739 23	12,395 80	19,142 17	304,551 32
Dodge, F. S.	85,087 28	155,000 00	227,169 44	3,528 87	3,300 36	424,145 95	.....	3,300 36	192,182 07	154,150 56	74,452 96	424,145 95
McClure, Charles	25,418 18	105,000 00	245,446 37	9,679 64	4,679 30	390,223 49	.....	4,679 30	359,499 59	2,456 57	23,588 03	390,223 49
Witcher, J. S.	10,882 58	.....	161,205 50	11,972 00	1,637 76	185,697 84	.....	1,637 76	178,271 50	5,788 58	.....	185,697 84
Whipple, Charles H.	55,631 55	.....	343,209 92	33,075 75	14,529 09	446,446 31	659 00	14,529 09	405,708 50	2,931 32	22,618 40	446,446 31
Comegys, W. H.	44,636 65	18,000 00	258,790 69	15,908 67	6,208 93	343,544 94	.....	6,208 93	283,156 60	37,110 63	17,068 78	343,544 94
Bash, D. N.	47,431 64	.....	151,000 00	13,899 98	8,072 74	220,404 36	.....	8,072 74	208,601 30	879 59	2,850 73	220,404 36
Tucker, W. F., Jr.	53,693 10	130,000 00	303,364 06	23,707 80	11,856 16	522,621 12	9,600 00	11,856 16	425,510 27	58,533 36	17,121 33	522,621 12
Muhlenberg, J. C.	19,263 18	.....	186,500 00	10,844 75	7,761 82	240,460 75	.....	7,761 82	203,753 63	11,800 69	17,153 61	240,460 75
Poole, D. C.	85,703 85	.....	240,203 64	16,548 50	3,271 87	279,727 36	.....	3,271 87	256,469 27	3,500 00	22,486 22	279,727 36
Smith, George R.	22,903 42	20,000 00	240,080 80	12,241 00	4,674 59	805,899 90	.....	4,674 59	231,416 75	21,977 06	47,831 50	805,899 90
Clayton, Henry	18,634 55	54,000 00	106,480 23	8,424 00	8,393 94	186,932 72	.....	8,393 94	160,021 88	5,453 97	20,062 95	186,932 72
Baker, John F.	50,707 62	125,000 00	464,500 00	20,779 50	12,392 91	673,380 03	4,500 71	12,302 91	499,479 48	115,680 63	41,326 80	673,380 03
Lyle, D. A., capt. Ord. Dept. ....	.....	.....	1,500 00	.....	.....	1,500 00	.....	.....	.....	.....	1,500 00	1,500 00
Allen, H. T., lieut., 2d Cav.	2,000 00	.....	.....	.....	.....	2,000 00	.....	.....	.....	2,000 00	.....	2,000 00
Total	1,465,139 76	12,986,000 00	11,424,806 91	469,031 55	274,969 36	26,599,947 53	202,148 53	274,969 36	13,444,733 15	11,424,800 91	1,253,289 63	26,599,947 53

Statement of the account of the Pay Department, U. S. Army, with the several appropriations subject to its control during the fiscal year ending June 30, 1886.

Appropriations.	In account with the Treasury.					Total.
	Balance in the Treasury July 1, 1885.	Amount of appropriations.	Unexpended balances deposited by paymasters.	Collections deposited by paymasters.	Repayment in settlement of accounts.	
Pay, &c., of the Army, 1886		\$12,405,000 00	\$12 72	\$105,828 54	\$1,544 06	\$12,512,388 22
Pay of the Military Academy, 1886		228,845 00			25 66	228,870 66
Signal Service pay, 1886		247,301 51				247,301 51
Pay, &c., of the Army, 1885	\$86,719 61		90,464 95	57,989 92	281 65	245,456 13
Pay of the Military Academy, 1885	20,218 50				81 88	20,299 88
Signal Service pay, 1885	53,158 00		4,406 56	17 56	53 10	57,695 22
Pay, &c., of the Army, 1884	103,921 03		35,017 00	849 73	270 00	140,057 76
Pay of the Military Academy, 1884	9,513 73		590 93			10,104 66
Signal Service pay, 1884	39,086 10		358 86			39,444 94
Pay, &c., of the Army, 1883, and prior years			66,345 97	4,183 74	1,352 06	71,881 77
Pay of the Military Academy, 1883, and prior years				6 00		6 00
Pay of two and three years' volunteers			*1,417 93	203 72	12,333 44	13,965 09
Bounty to volunteers, their widows, and legal heirs			*4,069 33			4,069 33
Bounty to Fifteenth and Sixteenth Missouri Cavalry Volunteers		100 00				100 00
Bounty, under act of July 28, 1866			*2,368 30		200 00	2,568 30
Extra pay to officers and men who served in the Mexican war		42,765 93				42,765 93
Three months' pay proper, act of July 3, 1864		18,500 00				18,500 00
TRANSFER ACCOUNTS.						
Pay, &c., of the Army, 1883, and prior years		5,481 51			306 70	5,788 30
Pay of two and three years' volunteers, 1871, and prior years		2,846 98			164 09	3,011 07
Pay of volunteers (Mexican war), 1871, and prior years		114 50				114 50
Bounty to volunteers and regulars on enlistment, 1871, and prior years					53 74	53 74
Bounty to volunteers, their widows, and legal heirs, 1871, and prior years		982 62			189 50	1,172 12
Bounty under act of July 28, 1866					1,172 12	1,172 12
COLORED CLAIMS.						
Collection and payment of bounty, &c., due colored soldiers and sailors, 1883, and prior years				45		45
Collection and payment of bounty, &c., due colored soldiers and sailors, 1884	1,526 38					1,526 38
Collection and payment of bounty, &c., due colored soldiers and sailors, 1885	650 00					650 00
Collection and payment of bounty, &c., due colored soldiers and sailors, 1886		2,000 00				2,000 00
Total	330,793 35	12,953,938 05	205,112 55	169,084 14	18,028 49	13,676,956 58

* Above items represented by deposit requisition No. 6510, dated January 23, 1886, suspended by Second Comptroller, and still pending in that office. Cover-in warrant for same issued since July 1, 1886.

Statement of the account of the Pay Department, U. S. Army, with the several appropriations subject to its control, &c.—Continued.

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REPORT OF THE SECRETARY OF WAR.

Appropriations.	In account with the Treasury.					Balance in hands of paymasters, June 30, 1886.	Total balance June 30, 1886.
	Amount drawn by requisition of Pay Department.	Amount drawn by requisition of War Department.	Amount covered in to surplus fund. Act of July 20, 1874.	Total.	Balance in the Treasury June 30, 1886.		
Pay, &c., of the Army, 1886.....	\$12,405,983 12	\$2,053 29	.....	\$12,408,036 41	\$104,349 81	\$1,176,475 25	\$1,280,825 06
Pay of the Military Academy, 1886	213,000 00	.....	.....	213,000 00	15,870 66	30,938 00	46,808 66
Signal Service, pay, 1886	220,000 00	.....	.....	220,000 00	27,301 51	831 90	28,183 41
Pay, &c., of the Army, 1885	32,500 00	9,236 26	.....	41,736 26	203,719 87	19,939 28	223,659 15
Pay of the Military Academy, 1885	12,000 00	.....	.....	12,000 00	14,299 88	.....	14,299 88
Signal Service, pay, 1885	16,016 88	.....	.....	16,016 88	41,678 34	618 12	42,296 46
Pay, &c., of the Army, 1884	5,000 00	.....	.....	.....	100,000 00	5,906 20	105,906 20
Pay of the Military Academy, 1884 .....	.....	3,868 70	\$31,189 06	40,057 76	.....	.....	.....
Signal Service, pay, 1884 .....	.....	104 16	10,000 50	10,104 66	.....	.....	.....
Pay, &c., of the Army, 1883, and prior years .....	.....	3,433 53	36,015 91	39,449 44	.....	.....	.....
Pay of the Military Academy, 1883, and prior years .....	.....	.....	71,881 77	71,881 77	.....	.....	.....
Pay, &c., of the Army, 1881, and prior years .....	.....	.....	6 00	6 00	.....	.....	.....
Pay of two and three years' volunteers .....	.....	.....	.....	.....	.....	26 70	26 70
Pay of two and three years' volunteers .....	.....	.....	12,537 16	12,537 16	*1,417 93	.....	1,417 93
Bounty to volunteers, their widows, and legal heirs .....	.....	.....	.....	.....	.....	760 68	760 68
Bounty to volunteers, their widows, and legal heirs, 1871, and prior years .....	.....	.....	.....	.....	*4,069 33	.....	4,069 33
Bounty to Fifteenth and Sixteenth Missouri Cavalry Volunteers .....	.....	100 00	.....	100 00	.....	3,656 93	3,656 93
Bounty, under act of July 23, 1866 .....	.....	.....	200 00	200 00	*2,368 30	3,510 00	3,510 00
Bounty, under act of July 23, 1866-1880, and prior years .....	.....	.....	.....	.....	.....	715 00	2,368 30
Extra pay to officers and men who served in the Mexican war	42,000 00	765 93	.....	42,765 93	.....	3,745 53	715 00
Three months' pay proper, act of July 3, 1884	18,500 00	.....	.....	18,500 00	.....	0,073 54	3,745 53
Pay of volunteers (Mexican war), 1871, and prior years .....	.....	.....	.....	.....	.....	36 50	6,073 54
TRANSFER ACCOUNTS.							
Pay, &c., of the Army, 1883, and prior years .....	.....	5,788 30	.....	5,788 30	.....	.....	.....
Pay of two and three years' volunteers, 1871, and prior years .....	.....	3,011 07	.....	3,011 07	.....	.....	.....
Pay of volunteers (Mexican war), 1871, and prior years .....	.....	114 50	.....	114 50	.....	.....	.....
Bounty to volunteers and regulars on enlistment, 1871, and prior years .....	.....	21 63	32 11	53 74	.....	.....	.....
Bounty to volunteers, their widows, and legal heirs, 1871, and prior years .....	.....	1,172 12	.....	1,172 12	.....	.....	.....
Bounty under act of July 23, 1866 .....	.....	89 50	1,082 62	1,172 12	.....	.....	.....
COLORED CLAIMS.							
Collection and payment of bounty, &c., due colored soldiers and sailors, 1883, and prior years .....	.....	.....	45	45	.....	.....	.....

Collection and payment of bounty, &c., due colored soldiers and sailors, 1884.....			1,526 38	1,526 38			
Collection and payment of bounty, &c., due colored soldiers and sailors, 1885.....		59 22		59 22	590 78		590 78
Collection and payment of bounty, &c., due colored soldiers and sailors, 1886.....	1,000 00			1,000 00	1,000 00		1,000 00
Total.....	12,966,000 00	29,818 21	164,471 96	13,160,290 17	516,666 41	1,253,289 63	1,760,956 04

*Above items represented by deposit requisition No. 6510, dated January 23, 1868, suspended by Second Comptroller and still pending in that office. Cover-in warrant for same issued since July 1, 1886.

Statement showing the number of pay trips made, number of days consumed in travel, posts paid, miles traveled, and amount of field and office disbursements made by each disbursing officer of the Pay Department, during the fiscal year ending June 30, 1886.

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REPORT OF THE SECRETARY OF WAR.

Number.	Paymasters.	No. of pay trips.	Days consumed.	No. of posts paid.	Miles traveled.					Total.	Payments.			Remarks.
					Railroad.	Stage.	Steamer.	Ambulance.	Other conveyance.		In field.	In office.	Total.	
ASSISTANT PAYMASTERS-GENERAL.														
1	McClure, Daniel.....	4	32	11	2,466		513			2,979	\$39,397 06	\$34,424 60	\$73,821 66	
2	Febiger, George L.....	1	2	1	366					366	2,228 88	87,117 89	89,346 27	
DEPUTY PAYMASTERS-GENERAL.														
3	Smith, Rodney.....	15	53	17	3,949	15	1,612	275		5,851	87,321 57	164,819 41	252,140 98	
4	Rucker, W. A.....	2	2	2				12		12	22,290 59	310,710 66	333,001 25	
5	Johnson, Wm. H.....	8	7	9	1,002		28	15		1,045	56,000 99	165,397 85	221,398 84	
PAYMASTERS.														
6	Gibson, Wm. R.....	6	37	9	3,475	241		441		4,157	64,257 11	292,919 23	357,176 34	
7	Sprague, Charles J.....	15	50	31	328		4,363	56	120	4,867	92,802 38	157,692 97	250,495 35	
8	Smith, William.....	6	38	10	5,417	194	28	276	20	5,935	71,373 14	199,193 20	270,566 34	
9	Terrell, Chas. M.....	9	29	11	4,324			185		4,509	100,421 32	275,396 19	375,817 51	
10	Stanton, T. H.....	6	84	37	4,516	1,800		210		6,526	191,333 37	146,561 87	337,895 24	
11	Glenn, George E.....	10	55	19	3,212			1,224	66	4,502	47,124 55	123,971 22	171,105 77	
12	Canby, J. P.....	17	60	18	936	1,400		938	36	3,310	133,419 50	79,780 00	213,199 50	
13	Candee, Geo. W.....	5	15	5	1,830				20	1,850	11,554 91	218,264 54	229,634 32	
14	Dewey, I. O.....	4	34	13	4,061		884			4,945	21,399 71	201,234 61	222,634 32	
15	Carey, A. B.....	11	52	19	1,591	496	2,022	93	80	4,282	30,919 26	103,308 61	134,227 87	
16	Willard, J. P.....	3	5	3	560	7			6	573	13,669 49	20,370 18	34,039 67	
17	Coxe, F. M.....	10	141	61	3,718	180		1,907	105	5,970	210,291 41	117,079 03	327,370 44	
18	Bates, A. E.....	11	11	11				70		70	48,683 56	1,013,407 54	1,062,091 10	
19	Wilson, O. L.....	8	42	16	5,266	145		244		5,655	122,033 95	115,603 23	237,637 18	
20	Eckels, W. H.....	17	115	24	2,700			2,422		5,122	230,400 13	81,250 92	411,651 05	
21	Blaine, J. E.....	5	14	14	1,093		185			1,278	66,973 80	229,172 96	296,146 85	
22	Roche, J. R.....	8	58	14	5,390	405		587	12	6,394	115,296 78	164,298 82	279,595 60	
23	Towar, A. S.....	9	59	23	2,547	1,490	667	237	30	4,971	107,481 88	213,155 72	320,637 60	
24	Maynadler, W. M.....	13	131	40	8,214	111		940	98	9,372	279,631 11	162,934 48	442,565 59	
25	Arthur, Wm.....	24	81	32	8,310					8,310	241,658 02	529,790 74	771,448 76	
26	Sharp, Alex.....	7	137	48	10,283	798		1,841	8	12,929	228,810 74	127,850 11	356,660 85	
27	Keefer, J. B.....	6	23	19	6,811					6,811	76,770 87	188,806 65	210,577 02	
28	Wham, J. W.....	14	20	18	1,796		213		44	2,053	61,940 77	480,868 69	542,779 46	

29	Sniffen, C. C.....	4	14	13	1,010	18	1,028	89,899 37	176,081 52	265,980 89
30	Baird, Geo. W.....	6	66	20	7,146	14	8,040	139,743 80	258,716 62	398,460 42
31	Larned, D. R.....	11	57	13	4,929	416	5,793	47,288 05	40,448 94	87,736 99
32	Robinson, Geo. F.....	12	117	30	2,101	240	4,020	146,945 47	56,951 47	203,896 94
33	Creary, W. E.....	21	99	23	2,244	1,744	5,458	135,302 23	129,437 00	264,739 23
34	Dodge, F. S.....	5	44	8	1,693	90	2,222	80,967 78	111,214 29	192,182 07
35	McClure, Chas.....	24	35	40	3,399	522	4,009	92,247 23	267,252 36	359,499 59
36	Witcher, J. S.....	5	82	18	4,130	2,432	7,962	52,781 02	125,490 48	178,271 50
37	Whipple, Chas. H.....	9	106	30	2,295	335	5,870	310,544 93	95,163 57	405,708 50
38	Comegys, W. H.....	12	153	33	4,928	84	7,628	209,756 73	73,399 87	283,156 60
39	Bash, D. N.....	6	90	28	5,443	74	7,281	185,619 10	22,782 20	208,601 30
40	Tucker, W. F., jr.....	10	139	59	14,106	835	16,106	273,248 73	152,261 54	425,510 27
41	Muhlenberg, J. C.....	6	86	24	5,486	266	7,738	160,570 30	43,183 33	203,753 63
42	Poole, D. C.....	7	57	11	3,125	1,120	5,045	82,690 84	167,778 43	250,469 27
43	Smith, George R.....	10	99	36	12,242	342	13,353	146,191 10	85,225 65	231,416 75
44	Clayton, Henry.....	6	46	20	1,968	696	2,664	81,279 36	78,742 50	160,021 86
45	Baker, J. P.....	12	132	40	7,391	436	10,179	262,706 42	236,773 06	499,479 48
	Total.....	438	2,759	976	172,696	14,250	234,040	5,273,448 90	8,171,284 25	13,444,733 15

WAR DEPARTMENT,
PAYMASTER-GENERAL'S OFFICE, BOUNTY DIVISION,
Washington, D. C., September 30, 1886.

SIR: I have the honor to submit the following report for the fiscal year ending June 30, 1886, relative to the payment of claims for bounty, arrears of pay, &c., due colored soldiers or their heirs under section 2 of an "act making appropriations for sundry civil expenses of the Government, for the fiscal year ending June 30, 1880, and for other purposes," approved March 3, 1879.

One hundred and seventeen Treasury certificates, adjusted under the act above referred to, amounting to \$11,955.05, were on hand June 30, 1885, and 106, amounting to \$6,487.46, received from the Second Auditor of the Treasury during the year, making a total of 223 certificates, aggregating \$18,442.51.

One hundred and ninety-four of these, amounting to \$14,850.03, were paid, and two, amounting to \$464.41, returned to the Second Auditor of the Treasury, leaving on hand June 30, 1886, 27 certificates, aggregating \$3,123.07.

All claims were prepared for payment in this office, and payments made as follows:

	Number of claims.	Amount.
Maj. George R. Smith	1	\$12 22
Maj. A. B. Carey	127	8,992 41
Maj. I. O. Dewey	66	5,845 40
Total	194	14,850 03

Ninety-two claims, aggregating \$8,021.90, were paid through the Post-Office Department by post-office money-order, as provided by law.

There was appropriated, to meet the expenses of the payments, \$2,000, of which \$695.73 was expended—a trifle more than 4 per cent. on the amount disbursed.

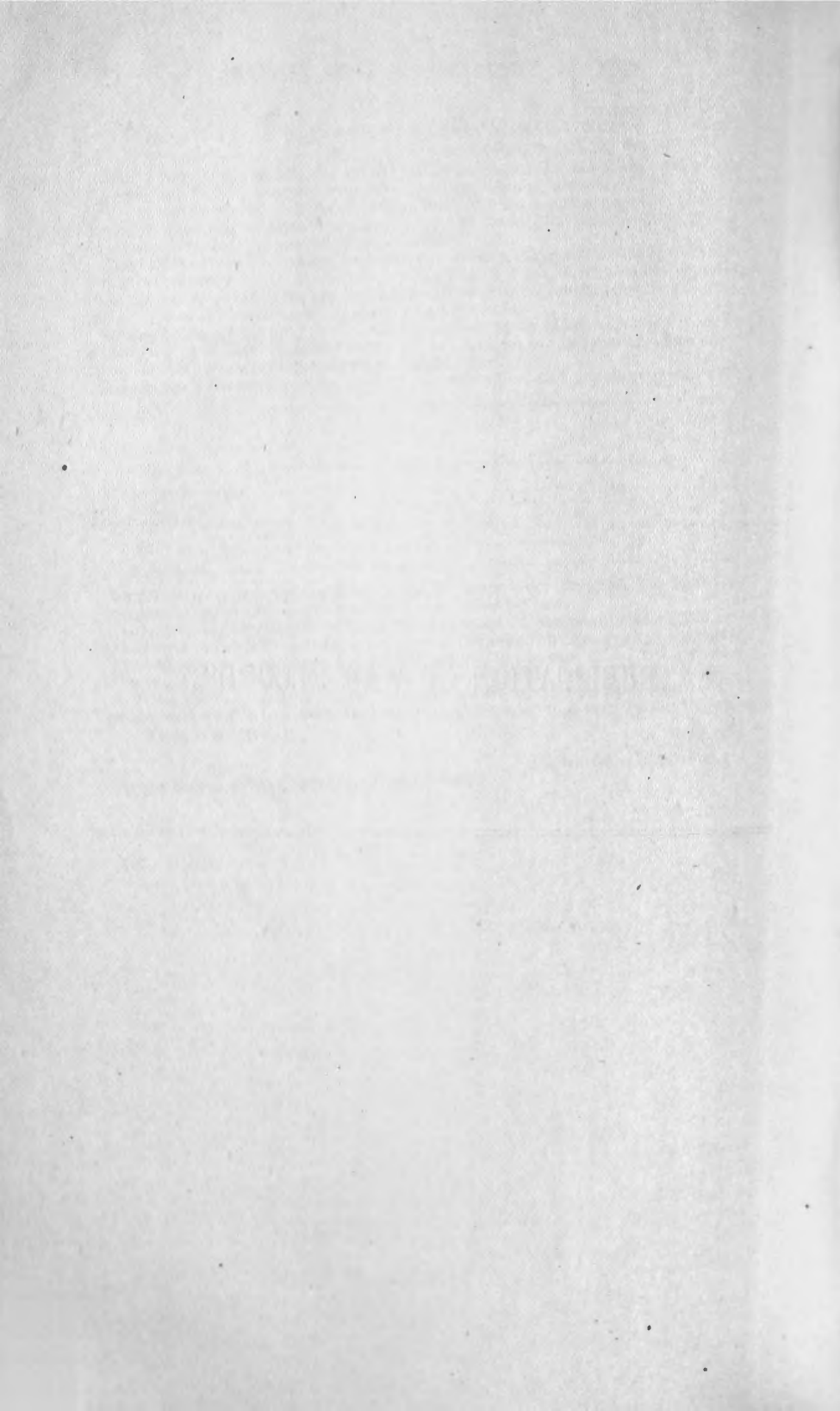
The percentage was larger than usual, owing to the fact that 1,740 certificates, aggregating \$170,352.73 (which have been received since June 30), were held in the office of the Second Auditor of the Treasury awaiting an appropriation by Congress. These certificates, when paid, will reduce the expense to a very small percentage.

Very respectfully,

I. O. DEWEY,
Paymaster, United States Army.

To the PAYMASTER-GENERAL OF THE ARMY.

PUBLICATION OF WAR RECORDS.



REPORT

OF

PUBLICATION OF WAR RECORDS.

WAR DEPARTMENT,
PUBLICATION OFFICE, WAR RECORDS 1861-'65,
Washington, D. C., October 9, 1886.

SIR: I have the honor to report the progress made since October 10, 1885, in the publication of the Official Records of the War of the Rebellion.

Of Series I, Volumes XIV, XV, and XVI (in two parts), and Part I. of Volume XVII (in all five books), have been issued, and the index of Part II, Volume XVII, is completed and in type. This part of Volume XVII and Volume XVIII will probably be issued by December 1 next. The text of Part II, Volume XXII, of Volume XXIII (in two parts), and of the first two parts of Volume XXIV has been stereotyped; and the third part of that volume and Volume XXV (in two parts) is in the hands of the Public Printer. The text of the Supplement to Volume XII (the record of the Fitz-John Porter court-martial, called for by the act of July 31, last) has been stereotyped and indexed, and will probably be issued before Congress reassembles. The manuscript of Volumes XXXI, XXXII, and XXXIII is arranged for the printer, but Volume XXX is yet incomplete.

The act approved August 7, 1882, which went into effect after the first five volumes of the records had been published, contemplated a completion of the sets to be issued under that law. For that purpose an estimate has been submitted for reprinting and binding 6,000 copies each of Volumes I to V.

The expenditures on account of printing, binding, &c., since October 10, 1885, are as follows:

For composition, stereotyping, &c., of volumes still in the hands of the printer—

Volume XXII, Part II	\$2, 224 40
Volume XXIII, Part I	1, 771 15
Part II	1, 990 60
Volume XXIV, Part I	1, 745 15
Part II	1, 433 95
Part III	798 90
Volume XII (Supplement)	240 00

To complete—

Volume XIV	6, 958 05
Volume XV	7, 924 41
Volume XVI, Part I	7, 683 26
Part II	6, 003 09
Volume XVII, Part I	5, 742 49

45, 115 45

RECAPITULATION.

Balance available as per last report.....	\$42,699 87
Appropriation for fiscal year ending June 30, 1887.....	36,000 00
Total	78,699 87
Expenditures	45,115 45
Available October 10, 1886	33,584 42

The expenditures for salaries and rent made under the immediate supervision of this office during the fiscal year ending June 30, 1885, have been as follows:

Salaries	\$31,364 04
Rent	1,200 00

Fuel, lights, stationery, and all other incidental expenses have been provided by the Supply Division of the War Department.

I respectfully invite attention to my recommendation accompanying estimate for fiscal year ending June 30, 1888, for \$600 additional compensation to the clerk of Class IV engaged in preparing the general index. This work is of the most important and responsible nature, and requires the services of a person of experience and special ability. The compensation now allowed (\$1,800) is inadequate for the service performed.

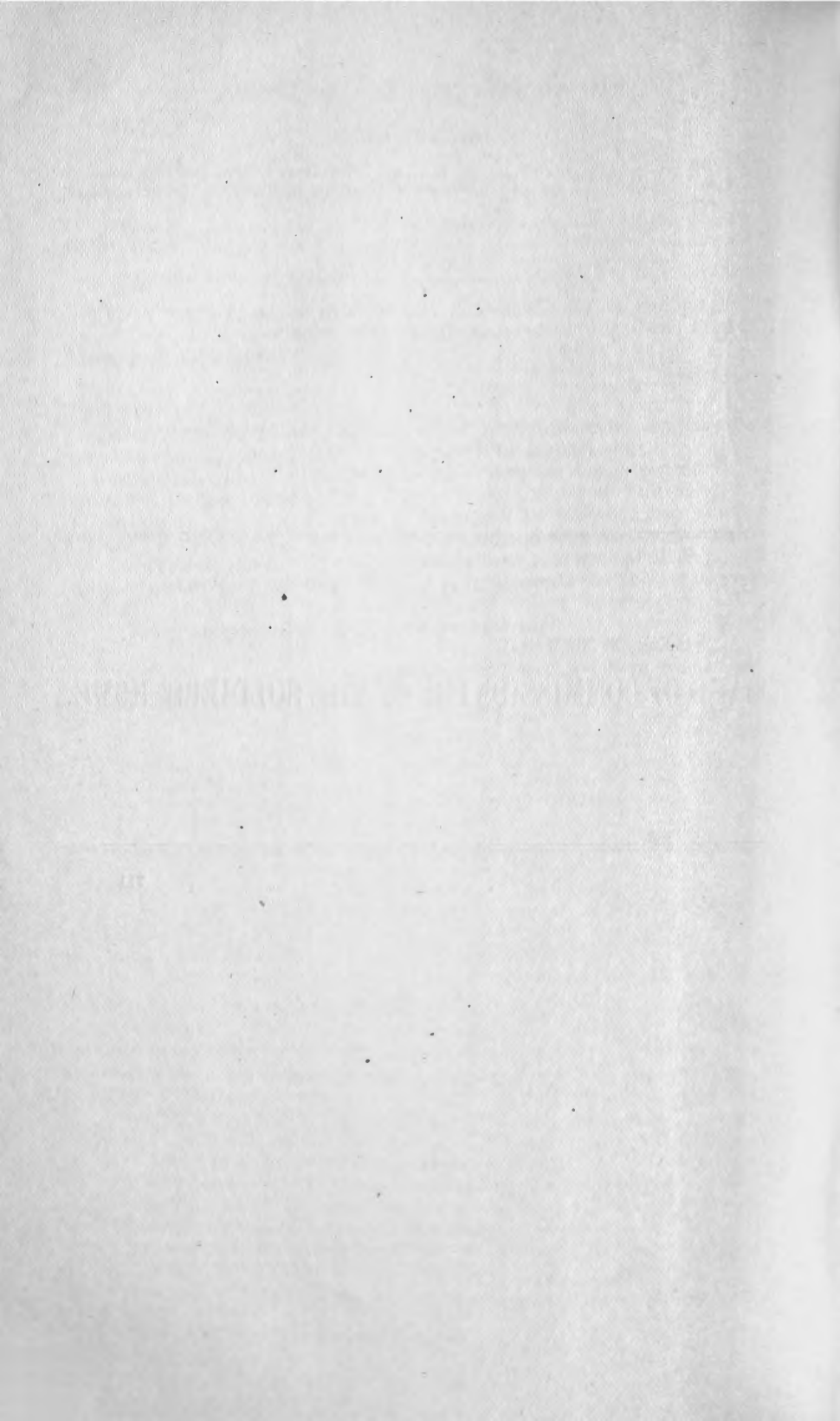
Very respectfully, your obedient servant,

ROBERT N. SCOTT,

Lieutenant-Colonel Third Artillery, in Charge.

The SECRETARY OF WAR.

BOARD OF COMMISSIONERS OF THE SOLDIERS' HOME.



REPORT

OF

BOARD OF COMMISSIONERS OF THE SOLDIERS' HOME.

OFFICE, BOARD OF COMMISSIONERS
OF THE SOLDIERS' HOME,
Washington, D. C., October 23, 1886.

SIR: In compliance with section 1 of the act of Congress approved March 3, 1883, "prescribing regulations for the Soldiers' Home," I have the honor to submit the following, which has been adopted by the Commissioners of the Home as their report for the year ending September 30, 1886:

Regular meetings of the Board have been held every month for the transaction of business pertaining to the affairs of the Home, and the consideration of applications for admission or readmission, for transportation, and for "out-door relief." Visits of inspection have also been made to the Home once in each month.

Number of persons receiving the benefits of the Home, as regular inmates or members, September 30, 1885	785	
Admitted and readmitted	310	
		1, 095
Discharged on their own request	93	
Suspended	30	
Dropped for absence without leave, and from "out-door relief"	28	
Dismissed	5	
Abandoned the Home	4	
Died	41	
		201
Receiving the benefits, September 30, 1886		894

There have been 197 temporary admissions during the year, nearly all for the purpose of awaiting the examination of their cases for regular admission. The record of service and disability in each case of an applicant for admission or readmission is considered by the Commissioners at a regular meeting. The number of temporary inmates in the Home September 30, 1886, was 52; making the total number receiving the benefits on that date 946. The number of names added to the register during the year by regular admission and for "out-door relief" was 208, which is fourteen more than any other year since the establishment of the Home. Two hundred and thirty-one of the members are allowed to make their residence elsewhere, generally with their families or friends, and are paid from the Home funds an allowance (termed "out-door relief" or "commutation") not exceeding \$8 per month. This commutation list was increased during the past year by 47 names, and the arrange-

ment has been encouraged by the Commissioners, because the accommodations at the Home for resident inmates are so limited.

A very large amount of money remains due to the Home from the old unsettled accounts in the Treasury Department. This money, together with the amount now in the "permanent fund" and in bonds, must form the reserve fund and afford an interest revenue, which, with the income from settlement of current accounts, must provide the means to maintain the Home in the future. Every encroachment upon this reserve is a matter of serious consequence. The current income, apart from the interest upon the reserve fund, appears to be diminishing. This income is the deduction of 12½ cents per month from the pay of each soldier, and the stoppages, fines, and forfeitures coming from month to month upon the accounts of the Pay Department of the Army. The settlement of these accounts during the past three years shows the alarming diminution referred to. In 1884 the amount derived was \$128,026.65; in 1885, \$122,528.91, while in the last year the amount was \$87,704.34, a decrease of \$37,573.44 from the average of the two preceding years. The Commissioners are unable to explain why this should be so, and inasmuch as the Army has been no smaller, and the amount of pay no less, it is hardly supposable that the causes which create the source of this income have so greatly abated as to make such a difference as has actually occurred. It must therefore be attributed to the settlements in the Treasury Department being less in number or of accounts covering shorter periods or fewer payments to the Army. Whatever it may be, the fact remains that, in order to maintain the Home during the year, the current income had to be supplemented by a little more than \$47,000 from the reserve fund. It is a matter of very little consequence how current accounts may be settled, provided the work proceeds uninterruptedly as rapidly as it accumulates, but there seems to be room for improvement in existing methods, and if there could be brought about a mutual agreement and arrangement between the Pay Department of the Army and the accounting officers of the Treasury Department, it might be possible for the former to ascertain and certify the amounts due the Home before the accounts pass to the latter for final settlement. Such arrangement would appear to insure regularity at least, and if it shall be found upon further consideration to have any promise of feasibility, some recommendations upon the subject may be submitted hereafter.

The treasurer's accounts show that there remained in his hands September 30, 1885, \$23,531.17, and that he received the following sums during the year: From the "permanent fund," upon requisitions by the Commissioners, \$136,020; interest, \$55,718.65; rent of property at Harrodsburg, Ky., and miscellaneous sources, \$2,555.14; effects of deceased inmates, \$482.38; total to be accounted for, \$218,307.34. Of this sum there was expended for the Home, for the purposes shown in the treasurer's statement, herewith, \$192,920.88, and \$1,000 (which was received for property taken by the United States in connection with the extension of the water supply for Washington City) was deposited in the permanent fund, leaving a balance in the treasurer's hands September 30, 1886, of \$24,386.46. It is the regular practice to draw from the United States Treasury the funds required for the expenses of each month only a few days before its close.

The "permanent fund" account in the United States Treasury showed a balance to its credit September 30, 1885, of \$445,182.90. The amount placed to the credit of the same fund during the year was \$219,601.11, making a total of \$664,784.01. The amount withdrawn for the use of

the Home was \$136,020, leaving a balance September 30, 1886, of \$528,764.01, a net increase of \$83,581.11. This fund bears interest at 3 per cent. per annum, which is paid to the treasurer of the Home quarterly, and forms a part of the current income. The payments received during the year amounted to \$14,318.65, and were for the year ending June 30, 1886. The interest for the quarter ending September 30, 1886, amounting to \$4,018.49, was under certificate, but had not been paid to the treasurer at the date of his report. The balance of the income reported by the treasurer as interest received is made up by interest for fifteen months on \$780,000 United States 4 per cent. bonds (\$39,000) and interest for one year on \$40,000 Missouri Pacific 6 per cent. bonds (\$2,400), making, with the \$14,318.65 above mentioned, a total of \$55,718.65.

Exhibits with the report of the treasurer show that the value of the farm and dairy products, estimated at regular market prices, exceeded the expenses of these departments, making a profit to the Home of \$4,806.66, while the account with the garden, against which is charged the expense of keeping the ornamental part of the grounds in order, shows a balance against that department of \$1,647.99.

The account with the inmate pensioners, which is a trust imposed by law upon the treasurer of the Home, shows that the amount received by him during the year was \$47,383.57, and that the amount paid by him to the individual pensioners was \$46,534.83. The Commissioners have heretofore expressed their views upon the payment of large pensions by the General Government to men who have all their wants supplied from the funds of the Soldiers' Home, and deem it futile to make any further endeavor to secure a modification of existing law regulating the subject, but it should be remarked that a sum of money almost equal to one-fourth of the expenses of the Home is not only paid to inmates, the most of whom have very little profitable use for it, but an officer of the Home is obliged to become the custodian of the funds, and perform a great amount of labor in keeping an individual account with each pensioner, to whom payments must be made frequently and in small amounts.

No building operations were carried on during the year and no real estate was purchased. In January, 1886, the Secretary of War approved a request of the Commissioners for authority to purchase from the Rock Creek parish a piece of ground containing a little less than one-fourth of an acre, which some years ago had been inclosed with the Home grounds by a permanent stone and iron fence, built along the road which separated this small piece from the main property. The parish is not yet ready to receive the purchase money, and it remains subject to their order. In the last report of the Commissioners it was stated that a balance of \$9,935.56 was due the contractors who built the new annex building, then just completed and occupied. The contractors made a claim prior to final settlement for a considerable sum for extra work upon the building not included in the contract. This claim was duly investigated, and, as a result, an award of \$500 was made by the Commissioners, and, with the balance due on the contract, has been paid.

Still further space for cooking and messing, as well as for dormitories, is demanded by the increased number of inmates, and plans have been adopted and are now being prepared, with estimates, for a large extension to the main building, which it is expected will cost about \$150,000.

At their last monthly meeting the Commissioners authorized the governor of the Home to place inmates in the building which has heretofore been reserved as a summer residence for the President of the United

States. It had become absolutely necessary to so occupy it in order to relieve other overcrowded quarters.

The Commissioners desire to call special attention to a matter of regular expense to the Home in maintaining a large and handsome park and an exceedingly well-planned system of beautiful drives, and to urge that a strong appeal be made to Congress for some measure of relief by an appropriation to keep up the repairs to road-beds, bridges, culverts, gutters, &c., for about 10 miles length of drives within the Home grounds. In the effort to make these extensive grounds attractive, a park has been formed, which has become a necessity, as a resort not only for the people of Washington City, but for the multitude of strangers who visit the national capital. It is the only park or place accessible to this city affording suitable conditions for riding or driving for pleasure, and the people who seek this enjoyment are not influenced through any interest whatever in promoting the happiness of the old soldiers whose money, accumulated from such apparently insignificant contributions as 12½ cents per month, has provided so convenient and inviting a place for healthful recreation. It is true that the grounds might be closed and the use of the roads prohibited, but it would manifestly be an unwise thing to do, as it would not only be a great deprivation to the people of Washington City, and in a measure to the people of the whole country, but it would result in a waste of property and impairment of the improvements which could hardly be justified.

The expense of keeping up these drives is burdensome to the Home, and ought not by any means to be longer imposed on its overtaxed income. There can be no doubt of the propriety of seeking and obtaining an appropriation from the public Treasury to meet the expense. Its use in maintaining a public privilege of the most acceptable kind is abundant reason for granting it. The form in which it shall be made and the channel through which it shall be applied may be left for consideration at the time of legislation, when more particular information can be given with respect to the amount of money required and the special uses to be made of it.

The Home continues to hold its property at Harrodsburg, Ky., and has kept it under lease at a rent of \$600 per annum. Early in the past summer a complaint that a pond upon the property was a source of disease affecting the inhabitants of the town close by, was received by the Commissioners, and upon their request a medical officer of the Army was ordered to inspect the place and report upon its sanitary condition. His report showed that the part of the town which would be most exposed to any contaminating influence from the pond had been quite free from that type of disease supposed to have its origin in impure water or pools and swamps, and the Commissioners decided that they would not be justified in incurring the expense necessary to abolish the pond. The property itself is for sale, and if at any time an offer shall be received of a sum sufficient to yield at 3 per cent. per annum an amount equal to the present rent, the Commissioners will no doubt deem it their duty to make a sale at public auction under the terms of the law which gives them authority to do so after advertisement. The property has been once so offered, but no bid equal to the minimum price was received, and it was withdrawn.

The stock of the Young Men's Christian Association Joint Stock Company, in which the Home has \$62,500 invested, has not yet acquired a market value. There is a debt of \$33,000 upon the property which will become due in June, 1889, and if the company shall be able to continue until then to increase their sinking fund at the average rate of the past

few years, there will be about half enough money on hand to pay the debt. A new loan for the balance at a lower rate of interest will no doubt be obtained, and the whole indebtedness may be paid in five or six years more. The law of Congress authorizing the loan requires the debt to be paid before any dividend can be declared for the stockholders. The papers accompanying this report are the annual report of the governor of the Home, treating of the internal affairs of the institution; the report of the treasurer, accompanied by six financial statements; the report of the attending surgeon, and a list of names of 208 men admitted to the Home during the year for which this report is made. Sixteen of these men are soldiers on the retired list, 53 are discharged soldiers who have served twenty years or more as enlisted men in the Army, and 139 discharged soldiers who have served less than twenty years, but who have been found to be entitled to the benefits of the Home by reason of disability incurred in the line of military duty of such degree as to disqualify them for further service.

The roster of officers at the Home remains as it was given in the last annual report, and no change has occurred in the Board of Commissioners except the retirement of the Surgeon-General of the Army August 6, 1886.

I am, sir, very respectfully, your obedient servant,
P. H. SHERIDAN,
*Lieutenant-General Commanding the Army,
President Board of Commissioners.*

The SECRETARY OF WAR.

GOVERNOR'S OFFICE, U. S. SOLDIERS' HOME,
Washington, D. C., October 15, 1886.

GENTLEMEN: I have the honor to submit my report for the year ending September 30, 1886.

Permanent beneficiaries, October 1, 1885.....	785
Admitted during the year.....	210
Readmitted.....	100
	<hr/>
	1,095
Dropped:	
By withdrawals.....	93
For absence without leave.....	11
Suspended.....	30
Dismissed.....	5
Deserted.....	4
Died.....	41
Commuters dropped.....	17
	<hr/>
	201
Permanent beneficiaries on rolls September 30, 1886.....	894

TEMPORARY INMATES.

Number receiving benefit September 30, 1885.....	16
Admitted during the year.....	197
	<hr/>
	213
Transferred to permanent rolls.....	102
Dropped.....	56
Died.....	2
Discharged.....	1
	<hr/>
	161
Temporary beneficiaries.....	<hr/>
	52
Total beneficiaries September 30, 1886.....	<hr/>
	946

Of whom 715 are inmates of the Home and 231 receive outside commutation not to exceed \$8 per month.

INTERNAL ECONOMY AND DISCIPLINE.

The number of inmates is steadily increasing. At the close of the four last Home years there were 453, 522, 617, and 715, respectively. The main hall and annexes being fully occupied and overcrowded, the building known as the "President's cottage" has been converted into an annex, and contains 40 inmates. This has given relief to the dormitories, but as the kitchen was originally intended but for half this number of men a new one is required. The range and ovens are old and are now overworked. They have been recently patched up, but new ones are almost indispensable. The mess-room is too small for the present number of inmates, and a second table has to be set, adding greatly to the labor. It is much to be desired that the new hall for which plans have been submitted to the Board should be built as early as possible. It will furnish a suitable mess-room and kitchen of modern construction.

The food is good, abundant, and well served. The cost per ration this year has averaged 23½ cents, and for the preceding year was 23 cents. The unfavorable season has given us a smaller supply of vegetables and fruits than that of last year, and less variety, and this appears in the price of the ration, although in both cases the cost of vegetables, whether raised on the grounds or purchased in market, is charged at market prices.

The buildings and grounds, the hedges, walks, roads, fences, and bridges are now all in good order. Heavy storms had greatly injured the roads, and a large portion of the fencing was old, rotten, and for years had been kept in place by props. The cost of repairs and new fencing has been heavy, but the usual charges under these heads will now be much reduced.

The supply of water has been increased and made sufficient by the sinking of a new well near the engine-house.

Since my last report a change in the uniform has substituted light flannel trousers and straw hats for summer wear in lieu of heavy articles, much to the comfort of the inmates, and improvement in their appearance.

There are two chaplains for the Home, one Catholic and one Protestant. Services are held by each every Sunday. They visit the hospital and attend the funerals of inmates of their respective denominations.

A temperance society was organized at the Home last October under the auspices of the "Woman's Christian Temperance Union of the District of Columbia," which holds regular weekly meetings. The membership of inmates is 102, besides 40 employes of the Home and citizens of the neighborhood. The society has proved a benefit to the Home, and is doing a good work.

A good minstrel and thespian company was formed last winter by the inmates, whose entertainments have added much to the pleasures of the men. For each entertainment a moderate compensation is awarded from the amusement fund, which has been so far expended mostly in the purchase of properties, &c. The amusement-room in the new annex has been fitted up with a stage and accessories, the scenery painted by one of the inmates, the music furnished by others. The entertainments are decidedly good, and the attendance large, the room generally crowded.

Last May a band of music was also organized. It now consists of the leader, Sergeant Piedfort, and thirteen members, all inmates, nearly all of whom were old bandsmen in the Army. Under Sergeant Piedfort's instruction the band is good, and improving rapidly. The bandsmen are divided into three classes, two of the first, eight of the second, and three of the third class, at monthly compensations of \$12, \$8, and \$6, respectively; the leader receives \$15.

The band attends all regular inspections and funerals, gives three concerts a week, and one at the hospital, which, as also the daily band practice, are well attended by the inmates. No more useful expenditures are made at the Home than those for the band and the minstrel company. They furnish employment for some thirty men, and for the exclusive benefit of the inmates.

LIBRARY AND READING-ROOM.

These are in a very flourishing condition. The number of volumes in the library is 4,085, an increase of 331 since last report.

Novels.....	1,307
Bound magazines.....	582
Poetry.....	205
History.....	211
Military works.....	187
Biography.....	139
Religion.....	106
Travels.....	92
Agricultural.....	34
Miscellaneous.....	1,222
Reading-room:	
Daily papers.....	18
Weekly.....	24
Pictorials.....	11
Magazines.....	26
Average daily attendance.....	214

Provision is made for regular daily readings to the blind and the illiterate.

An inmate is now employed at \$10 a month to bind, rebind, and repair books, magazines, and papers. Since December 22 he has bound 161, rebound 289, and repaired 342 volumes.

PENSIONERS.

The number of pensioners amongst the 715 inmates is 402, of whom only 32 have assigned their pensions to their families. The quarterly payments now made to them by the treasurer amount to over \$12,000. The Home was organized primarily for the benefit of old soldiers of long service—not less than twenty years—and for those who became disabled after a shorter period, and who were not otherwise provided for, but it was provided that all pensioners who wished to avail themselves of the benefits of the Home might do so by paying their pensions into the funds of the Home, thereby giving them the choice of the two benefits provided. By a manifest in advertence in codifying the statutes, this law was changed, so that the pensioner now receives both his pension and the benefits of the Home. These pensioners have generally served less than twenty years; a large proportion have served less than one enlistment; they have, therefore, contributed but little either in service or money to the Home. Being young they will receive more benefit than the old soldier. The result of this change in the laws is seen in

the rapid increase in the number of inmates, and the very large proportion of pensioners amongst them. It was an invitation and inducement to all pensioners to avail themselves of the benefits of the Home at the expense of the class of old soldiers, whose comforts from overcrowding and the increased cost of the Home are thereby diminished, and it makes a marked distinction between the inmates, the younger portion of whom are liberally supplied with money, whilst the old soldiers of long service receive a trifle, \$1 a month, for their small expenses, the barber, tailor, cobbler, pipes, and tobacco.

Doubtless the old rule bore hard on some of the pensioners, especially those who had families, but the new one bears hard upon the non-pensioners and the Home itself. A modification of the existing law is desirable. If all inmates of less than ten years' service were required to surrender their pensions to the Home in exchange for its benefits, those of from ten to fifteen years' service to surrender two-thirds, those of from fifteen to twenty years' service to surrender one-third, and only those of over twenty years' service to retain their whole pensions, it would be equitable to both the Home and the pensioners. The first result would be to diminish applications for admission, the second to cause the withdrawal of large pensioners of short service, especially those who could find employment.

Another class of men has been created who are all entitled to admission to the Home, soldiers retired after thirty years' service. Congress has made special provisions for them, granting a commutation of pay and allowances. On their admission to the Home they should surrender to it the commutation for their rations, clothing and fuel, as the Home furnishes these articles to them in kind. It is owing to the large and increasing number of these two classes that the new building is now urgently required. In both cases, of pensioners and retired soldiers who may under existing laws wish to assign their pensions or pay to dependent families, the Board should be authorized to assign to them also that part of the pension and the allowances payable to the funds of the Home, provided that in the case of a wife she married him whilst he was in service; otherwise a marriage would be an ordinary preliminary or often follow the admission to the Home of a pensioner.

GARDEN, FARM, AND DAIRY.

For details as to these, reference is invited to the treasurer's report. The season has been very unfavorable for both fruits and vegetables, and some of the crops were, as in the neighborhood, almost total failures.

The loss on the fruit and flower garden for the year was \$1,647.99, against a loss of \$1,807.77 last year; the profit on the farm was \$1,769.69, against a profit last year of \$4,912.09, showing that, even in the worst years, the farm is profitable.

The profit on the dairy for the last year is \$3,036.97; for the previous year, \$2,604.72. The herd has increased from 71 to 81 animals in the last year. The net profits on garden, farm, and dairy is \$3,158.67.

In connection with the treasurer's report I would respectfully call the attention of the Board to the failure of the Treasury Department to carry to the credit of the Home moneys appropriated more than thirty-five years ago by Congress to constitute its endowment fund. Slow as has been the settlement of the accounts in late years, it is now slower still, and, so far as this duty is neglected, so far is the Home compelled to pay its expenses out of its capital. It now needs an additional large

building—for which plans have been prepared—and the need is pressing. The “plant” of the institution is now being provided; its expenses are at the heaviest, and the failure to settle the accounts is impairing the endowment of the Home.

HOSPITAL.

The report of the surgeon, transmitted herewith, gives full details and indicates an improvement in the sanitary condition of the Home, the proportion of patients and of deaths to the number of inmates being reduced, as compared with previous reports. In some cases the deaths followed close upon admission of men in the last stages of disease, who came to the Home to die and be buried here.

I would again respectfully call the attention of the Board to the need of a proper cook for the hospital. With so many patients (many of them old men needing special diet) it is impracticable to obtain from amongst the inmates suitable cooks, and a liberal sum should be allowed for the hire of one.

Respectfully submitted.

HENRY J. HUNT,
Brevet Major-General, Governor.

The BOARD OF COMMISSIONERS,
UNITED STATES SOLDIERS' HOME.

REPORT OF THE TREASURER.

TREASURER'S OFFICE, UNITED STATES SOLDIERS' HOME,
Washington, D. C., October 12, 1886.

GENERAL: I have the honor to inclose herewith the following statements for the year ending September 30, 1886:

All receipts and expenditures pertaining to the Soldiers' Home funds; all receipts and payments in account with the moneys belonging to pensioners who have been inmates of the Home during the year; reports of receipts and expenditures on account of the garden, farm, and dairy.

Inclosed will be found a copy of the permanent fund and interest account, as stated by the warrant division of the Treasury Department.

The Treasury Department is progressing very slowly with the settlement of the old account of the Home. Since July 8, 1886, only \$1,462.70 of these accounts have been placed to the credit of the Home, notwithstanding Congress appropriated money to employ twelve clerks to settle the said accounts.

Prior to the passage of any appropriation for the settlement of the old account, the Department settled the fines, forfeitures, and contributions, but with no regularity.

The amount due from fines, forfeitures, and monthly contributions of 12½ cents from each soldier in the Army varies from year to year, as the accounts may or may not be settled; consequently the income of the Home varies.

The funds derived from this source, the interest on the bonds, and permanent fund, constitute the annual income of the Home.

If the fines and forfeitures and the soldiers' monthly contributions are not promptly settled and passed to the credit of the Home it becomes necessary to draw more heavily on the permanent or endowment fund of the institution.

The settlements for fines, forfeitures, and contributions in the year ending September 30, 1884, amounted to \$128,026.65; for the year ending September 30, 1885, to \$122,528.91. Taking these two years as guides as to what might have been expected for the year ending September 30, 1886, the Home ought to have had placed to its credit \$125,277.78, whereas only \$87,704.34 was placed to its credit.

To make up the difference, to meet the current expenses, drafts were made against the permanent fund.

The Home has not yet been paid for the grounds purchased with its funds and used as a cemetery, and afterwards taken possession of by the Government for a national cemetery.

FRUIT AND FLOWER GARDEN.

The products of the garden this year are not as abundant as last year, owing to continuous wet weather in June and July.

The laborers in the garden are employed in the ornamentation of the grounds in addition to caring for the fruit; consequently the expenditures in this branch of Home work must always exceed the receipts.

FARM.

There was an abundant crop of hay raised on the farm. The early crop of potatoes was almost a failure in this neighborhood. The wet weather in June and July was as injurious to the vegetable crop as it was to the fruit. Twenty-five acres were plowed up in the spring, and again during the summer, and in September planted in grass. A great deal of labor is done on the grounds or park by the farm hands that no farmer would think of doing; such labor gives no pecuniary return.

DAIRY.

The health of the cows during the past year has been good. The milk, which is the very best, is issued morning and afternoon.

The drains, gutters, and bridges have all been thoroughly repaired. One new stone bridge has been built in place of a broken culvert. The heavy rains in the early summer washed out many yards of stone gutters, as well as the road-beds.

The fences between the grounds and the Robinson estate, the Whitney estate, and on each side of Whitney avenue, and on the Harewood road, had been propped up in many places for some years. These fences have been taken down and either new ones put up or substantial ones made of such old material as was found useful.

Forty-eight hundred feet of stone wall and iron railing, 2,000 feet of hedging, and 1,500 feet of picket fencing of different kinds form the boundary lines of the grounds, and are in thorough order.

A large well has been dug near the pump-house, which yields, during the present drought, 25,000 gallons of pure cool water per day. This addition to the supply of water it is thought will be sufficient for the future requirements of the Home.

All clothing and property for use in the barracks, dining-room, and kitchen are invoiced to the governor. Articles purchased for officers' quarters are receipted for by the officers occupying the quarters.

Property purchased for the farm, garden, dairy, shops, stables, gate-houses, and roads, such as tools, carts, wagons, harness, animals, &c., are taken up on a return, and when worn out an officer is detailed to inspect it, and if found unserviceable it is either sold, used in the shops for repairs, or destroyed, as customary at all military posts, and dropped from the return.

Property for expenditure, such as lumber, lime, cement, bricks, sand, nails, iron, plumbers' fitting, tin, zinc, &c., is not taken up on a return, but is purchased in small quantities as it may be required for immediate use, and care taken to see that nothing is wasted. Old lumber, broken bricks, and partially worn materials of every kind are kept in store-houses and yards, to be used in repairs. Old iron, lead, brass, and copper, not fit for use in the shops, is sold, and the proceeds deposited to the credit of the Home.

The expenses for general repairs and permanent improvements, not including new buildings, for the future, will not be so large as they have been for the past four years. All of the buildings, the 8 miles of drives and roads, 12 miles of stone gutters, the drains, fencing, and plumbing, &c., four years ago were very much out of repair. Now that they have been put in good order the annual expense under these two heads ought to be considerably less.

I am, general, very respectfully, your obedient servant,

B. F. RITTENHOUSE,

Brevet Major, U. S. A., Secretary and Treasurer.

General H. J. HUNT,

Governor United States Soldiers' Home.

Annual report of receipts and expenditures on account of the United States Soldiers' Home, District of Columbia, from October 1, 1885, to September 30, 1886, by Brevet Maj. B. F. Rittenhouse, U. S. A., secretary and treasurer.

Receipts and expenditures.	1885.			1886.									Total.
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	
RECEIPTS.													
From the United States Treasurer, upon a resolution of the Board of Commissioners, and approved by the Secretary of War.....	\$8,000 00	\$9,500 00	\$8,000 00	\$2,000 00	\$13,500 00	\$16,500 00	\$14,000 00	\$11,900 00	\$18,350 00	-----	\$14,400 00	\$19,870 00	\$136,020 00
Interest on bonds and securities held as investments, and on the permanent fund.	11,221 90	-----	7,800 00	4,605 62	-----	7,800 00	3,604 06	-----	-----	\$12,887 07	-----	7,800 00	55,718 65
Effects of deceased inmates, subject to the demand of legal heirs.....	90 52	-----	17 80	-----	17 27	42 65	5 10	206 85	1 30	15 66	78 17	7 06	482 38
Rent of Harrodsburg property and miscellaneous sources.....	107 09	69 67	328 66	48 92	48 35	1,010 48	120 91	65 96	81 95	315 45	116 15	241 55	2,555 14
Total receipts.....	19,419 51	9,569 67	16,146 46	6,654 54	13,565 62	25,353 13	17,730 07	12,172 81	18,433 25	13,218 18	14,594 32	27,918 61	194,776 17
EXPENDITURES.													
Furniture for officers' quarters and repairs for same.....	-----	-----	34 70	104 41	-----	14 25	102 95	5 76	26 40	-----	8 42	-----	296 89
Compensation to the treasurer of the Home and to the clerk of the Board of Commissioners.....	175 00	175 00	175 00	175 00	175 00	175 00	175 00	175 00	175 00	175 00	175 00	175 00	2,100 00
Transportation of inmates to the Home....	2 00	32 70	223 54	-----	-----	75 00	43 95	-----	174 48	35 00	58 02	-----	644 69
Fuel.....	2,180 45	-----	65 00	-----	543 37	-----	649 40	-----	7 00	85 40	68 00	-----	3,598 62
Expenses of the hospital for medicines, medical stores, spectacles, false teeth, material for coffins, &c.....	163 51	111 71	102 25	283 97	141 27	140 11	112 78	135 64	76 06	99 94	250 92	181 35	1,799 51
Mess and kitchen utensils, and contingent expenses of the hospital, and pay of clinical assistant.....	72 94	93 40	143 91	79 64	163 15	244 89	65 00	68 50	151 67	73 90	104 03	166 47	1,427 50
Refunded to claimants of deceased soldiers' effects.....	-----	87 45	62 98	1,158 03	47 26	90 64	116 78	49 59	-----	60 45	38 01	16 88	1,728 07
Refunded to claimants of deceased inmates' effects.....	134 68	-----	-----	-----	1 02	-----	-----	181 35	140 00	24 05	3 16	-----	484 26
Subsistence stores, including special diet and stimulants for the sick, and ice....	3,743 93	3,810 41	3,973 66	4,051 40	3,716 79	3,815 20	3,584 47	3,548 79	4,148 67	4,564 89	4,152 68	4,108 25	47,219 14
Clothing for inmates.....	6,196 32	5,433 38	64 80	-----	-----	1,250 00	2,190 09	4,354 53	-----	-----	-----	-----	19,489 12
Bedding for inmates, bedsteads, blankets, upholstering material, &c.....	302 06	-----	1,482 60	209 39	157 30	393 00	26 83	80 00	-----	305 33	-----	120 00	3,076 51
Farm and garden utensils, seeds, guano, manure, &c., cultivation of garden, ornamentation of grounds, and pay of farm, garden, dairy, and other employes.	1,270 97	1,400 97	1,134 43	1,037 60	1,075 90	2,062 87	1,661 05	1,562 22	3,336 48	2,049 49	2,214 33	1,779 10	20,585 41

Annual report of receipts and expenditures on account of the United States Soldiers' Home, District of Columbia, &c—Continued.

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REPORT OF THE SECRETARY OF WAR.

Receipts and expenditures.	1885.			1886.									Total.
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	
EXPENDITURES—continued.													
Mess and kitchen utensils and other articles (except bedding) for main building.	\$54 52	\$346 25	\$80 76	\$163 53	\$286 75	\$24 82	\$10 50	\$79 22	\$68 81	\$23 86	\$70 69	.....	\$1,209 71
Material and labor for general repairs to buildings, fences, and roads; purchase and repair of harness, vehicles, &c.; purchase of mechanical tools.	1,860 57	1,591 72	1,160 59	657 51	400 43	822 01	805 57	936 85	1,240 62	1,039 97	1,516 53	\$2,105 59	13,637 96
Forage and medicines for home animals; articles used in the stables; straw used for bedding for inmates.	175 00	195 01	276 07	308 82	422 97	572 89	452 52	640 85	185 18	147 85	208 97	181 14	3,767 27
Expenses of the library, governor's and treasurer's offices; postage and post-office box rent; stationery, &c., for commissioner's office; freight; telegrams; amusements.	124 42	202 17	452 89	266 95	170 05	1,046 02	222 50	621 05	850 39	210 40	171 60	388 46	4,226 90
Incidental expenses, rent of safe, telephone, hack-hire, advertising, traveling expenses, professional services, and expenses of the Home chapel.	60 05	50 00	65 00	145 00	104 80	77 00	55 56	300 00	74 00	50 00	50 00	78 00	1,100 41
Religious services.	150 00	150 00	150 00	150 00	150 00	150 00	150 00	150 00	130 00	130 00	130 00	130 00	1,720 00
Laundry work.	332 56	220 54	226 11	229 51	239 02	238 67	241 81	243 00	233 57	240 36	249 17	446 95	3,141 27
Extra-duty pay and monthly allowances to inmates.	3,143 85	18 35	3,246 83	11 66	3,164 15	7 66	3,295 55	19 40	3,454 85	1 25	3,777 78	.....	20,141 33
Commutation to members of the Home residing outside.	208 00	104 00	3,866 00	123 35	138 29	3,896 58	170 40	98 40	4,241 60	190 00	148 40	4,352 67	17,537 64
Gas.	264 75	341 55	412 05	497 25	429 15	365 70	314 70	261 15	179 85	142 20	171 15	220 80	3,600 30
Board and medical treatment of members of the Home in Government Hospital for Insane.	538 57	.....	.....	507 85	.....	.....	.....	.....	.....	461 44	.....	500 71	2,008 57
Funeral expenses of members of the Home residing outside.	.....	.....	25 00	.....	.....	.....	25 00	.....	4 00	.....	.....	.....	54 00
New annex, under and outside of contract.	1,445 62	34 30	9,935 56	.....	.....	.....	585 00	.....	.....	.....	.....	.....	12,000 48
Permanent improvements, new fences, wells, bridges, lamp posts, gas lamps, paving, &c.	.....	115 76	227 20	63 47	.....	47 90	3,200 77	334 79	927 85	287 80	283 44	177 34	4,666 32
Purchase of animals.	75 00	.....	.....	.....	.....	305 00	.....	.....	.....	150 00	.....	.....	530 00
Deposited in the United States Treasury to the credit of the permanent fund.	.....	.....	.....	.....	.....	1,000 00	.....	.....	.....	.....	.....	.....	1,000 00
Preparation for extension of main building.	.....	.....	.....	.....	.....	.....	.....	.....	.....	120 00	1,000 00	.....	1,120 00
Total expenditures.	22,174 77	14,514 67	27,586 93	10,224 84	11,526 67	16,815 16	17,258 18	13,846 09	19,326 48	10,668 58	14,850 80	15,128 71	193,920 88

RECAPITULATION.

RECEIPTS.

Balance on hand September 30, 1885	\$23,531 17
From the Treasurer of the United States upon a resolution of the Board of Commissioners, &c	136,020 00
Interest on bonds and securities held as investments and on permanent fund ..	55,718 65
Effects of deceased inmates, subject to the demand of legal heirs	482 88
Rent of Harrodsburg property and miscellaneous sources	2,555 14
	<u>\$218,307 34</u>

EXPENDITURES.

Furniture for officers' quarters, and repairs for same	296 89
Compensation to the treasurer of the Home fund and to the clerk of the Board of Commissioners	2,100 00
Transportation of inmates to the Home	644 69
Fuel	3,598 62
Expenses of the hospital for medicines, medical stores, &c., spectacles, false teeth, and material for coffins	1,799 51
Expenses of the hospital, pay of clinical assistant, purchase of mess and kitchen utensils, and all contingent expenses	1,427 50
Refunded to claimants of effects of deceased soldiers	1,728 07
Refunded to claimants of effects of deceased inmates	484 26
Subsistence stores, including special diet and stimulants for the sick, and ice ..	47,219 14
Clothing for inmates	19,489 12
Bedding, bedsteads, blankets, and upholstering material	3,076 51
Expenses of the garden, ornamentation of the grounds, pay of farm, garden, dairy, and other employes, farm and garden utensils, seed, guano, manure, &c. .	20,585 41
Mess and kitchen utensils and other articles (except bedding) for main building ..	1,209 71
Material and labor for general repairs of buildings and fences, repair and purchase of harness and vehicles, and mechanical tools	13,637 96
Forage and medicines for animals, articles used in the stables, straw for bedding for inmates	3,767 27
Expenses of the library, governor's and treasurer's offices, postage, post-office box rent, stationery, &c., for commissioners' office, freight, telegrams, amusements	4,226 90
Incidental expenses, rent of safe, telephone, hack hire, advertising, traveling expenses, professional services, expenses of the chapel	1,109 41
Religious services	1,720 00
Laundry work	3,141 27
Extra-duty pay and monthly allowance to inmates	20,141 33
Commutation to members of the Home residing outside	17,537 64
Gas	3,600 30
Board and medical treatment of members of the Home in the Government Hospital for Insane	2,008 57
Funeral expenses of members of the Home residing outside	54 00
New annex, under and outside of contract	12,000 48
Permanent improvements, new fences, wells, bridges, lamp posts, gas lamps, and paving	4,666 32
Purchase of animals	530 00
Preparation for extension of main building	1,120 00
Deposited in United States Treasury to credit of the permanent fund	1,000 00
	<u>193,920 88</u>
Balance on hand September 30, 1886	24,386 46

The last item was not an expenditure. It was money received from the United States for land sold for the water-works extension and deposited to the credit of the permanent fund. The sum of actual expenses is therefore \$192,920.88.

Comparative statement of moneys received and disbursed on account of the United States Soldiers' Home, District of Columbia, for twelve months.

Received from October 1, 1884, to September 30, 1885	\$250,113 27
Received from October 1, 1885, to September 30, 1886	194,776 17
Expended from October 1, 1884, to September 30, 1885	213,468 98
Expended from October 1, 1885, to September 30, 1886	193,920 88
Average number of inmates for the year	<u>625</u>
Average cost of ration per month, including milk, vegetables, and fruit raised on Home grounds	\$7 09+
Average cost of ration per day	<u>23¢</u>

*Farm account from October 1, 1885, to September 30, 1886, United States Soldiers' Home,
District of Columbia.*

DR.

1885.		
October...	To labor, citizens' roll.....	\$403 85
	Watchman, extra-duty roll, September and October.....	16 80
	Labor, cart driver, September and October.....	15 00
	Forage.....	20 92
November..	do.....	21 50
	Labor, citizens' roll.....	883 00
	2 carts, new.....	170 00
December..	Forage.....	21 45
	1 cart harness complete.....	20 00
	Labor, citizens' roll.....	333 00
	Labor, extra duty, cart drivers, November and December.....	15 00
1886.		
January...	Labor, citizens' roll.....	248 00
	Forage.....	22 50
February...	do.....	22 50
	86 loads manure.....	55 90
	Labor, citizens' roll.....	248 00
	Labor, cart driver, January and February.....	15 00
March.....	Forage.....	22 53
	Labor, citizens' roll.....	398 11
	Labor, extra duty, cart drivers.....	33 74
April.....	Forage.....	22 50
	Labor, citizens' roll.....	480 55
	Labor, extra-duty roll, March and April.....	15 00
	Manure from G. A. Woodruff, in March.....	325 00
May.....	2 No. 6 Eureka mowers.....	170 00
	Extras for Eureka mowers.....	48 50
	Labor, citizens' roll, \$408.94; forage, \$30.69.....	439 03
June.....	1 Dutton mower and knife grinder.....	7 00
	Forage, \$34.65; 1 ton coal, in May, \$7.....	41 65
	Repairing wheels on hay rake.....	3 25
	Extras for Eureka mower.....	4 67
	Garden seeds.....	116 37
	250 bushels Early Rose seed potatoes.....	250 00
	200 bushels seed potatoes.....	100 00
	Cartage on seed potatoes.....	3 50
	8 picks, \$3; 3 mattocks, \$3; 6 handles, \$1.20.....	7 20
	5 tons potato guano.....	150 00
	6 London cutter shares.....	3 00
	8 tons bone dust.....	105 00
	25 bushels orchard grass, at \$2.25.....	56 25
	5 bushels clover seed, at \$7.....	35 00
	15 cultivator teeth, \$1.50; 4 hoes, \$1.40.....	2 90
	10 half-bushel baskets.....	3 00
	6 English scythes.....	6 60
	12 whetstones.....	1 20
	10 hay forks.....	5 00
	4 spades.....	2 60
	12 shares for Cassidy plow.....	7 20
	1 double harrow.....	10 00
	6 castings for potato planter.....	6 00
	400 pounds bone dust.....	7 00
	$\frac{1}{2}$ ton plaster, \$3; 1 pound Paris green, 35 cents.....	8 35
	3 tons plaster, delivered, at \$7.50.....	22 50
	60 pounds Paris green.....	18 00
	5 tons bone dust.....	175 00
	20 bushels buckwheat.....	20 00
	Cartage on buckwheat and bone dust.....	6 00
	13 pounds $\frac{1}{2}$ -inch rope.....	1 83
	$\frac{1}{2}$ dozen English scythes.....	6 60
	$\frac{1}{2}$ dozen scythe stones.....	1 20
	$\frac{1}{2}$ dozen scythes anaths.....	4 50
	Laborer, harvesting.....	11 88
	Harvesting for June.....	814 89
	Labor, farm hands.....	424 76
	Cart driver for May and June.....	15 00
July.....	Forage.....	28 77
	Labor, citizens' roll.....	466 13
	Labor, harvesting.....	422 22
August...	Forage.....	29 40
	Labor, citizens' roll.....	475 50
	2 watchmen, extra-duty roll.....	31 30
	12 tons R. A. egg coal, for the year, at \$4.95.....	59 40
	5 tons W. A. stove coal, for the year, at \$5.70.....	28 50
	73 cords wood, for the year, at \$6.50.....	47 13
September..	800 cart loads manure from dairy, at 50 cents.....	400 00
	100 cart loads manure from stables, at 75 cents.....	75 00
	Labor, citizens' roll.....	453 02
	To balance in favor of farm.....	1,799 69
	Total.....	10,789 51

Farm account from October 1, 1885, to September 30, 1886, &c.—Continued.

CR.

1885.		
October....	By 1 double team and driver, 13 days, at \$4 per day.....	\$52 00
	1 man, 16 days, at \$1.25 per day, other than farm work.....	20 00
	11 bushels peppers, at \$1.....	11 00
	2 bushels okra, at \$2.....	4 00
	13 bushels carrots, at \$1.....	13 00
	135 bushels tomatoes, at 50 cents.....	67 50
	170 bushels spinach, at 61 cents.....	103 70
	100 bushels turnips, at 41 cents.....	41 00
	34 bushels beets, at 50 cents.....	17 00
	86 bushels Lima beans, at \$3.93.....	141 48
	285 bushels sweet potatoes, at 53 cents.....	151 05
	4,500 ears corn, at 1½ cents.....	56 26
	66 egg plants, at 4 cents.....	2 64
	155 bunches parsley, at 8 cents.....	12 40
November..	1 double team and driver, 3½ days, at \$4 per day.....	14 00
	1 man, 1½ days, at \$1.25 per day.....	1 88
	75 bushels beets, at 50 cents.....	37 50
	131 bushels spinach, at 45 cents.....	58 95
	162 bushels turnips, at 25 cents.....	40 50
	54 bushels carrots, at 50 cents.....	27 00
	157 bunches parsley, at 5 cents.....	7 85
	1,330 heads cabbage, at 6 cents.....	79 80
	1,175 stalks celery, at 5 cents.....	58 75
December..	500 bushels turnips stored in dairy, at 25 cents.....	125 00
	1 double team and driver 7 days, at \$4 per day.....	28 00
	1 cart and driver, 2 days, at \$2 per day.....	4 00
	1 man, 6 days, at \$1.25 per day.....	7 50
	23 bushels spinach, at 67 cents.....	14 74
	57 bushels turnips, at 25 cents.....	14 25
	1 bushel salsify.....	4 00
	80 bushels parsnips at 50 cents.....	40 00
	164 bunches parsley, at 10 cents.....	16 40
	2,100 stalks celery, at 6 cents.....	126 00
	1,495 heads cabbage, at 6 cents.....	89 70
	506 bushels turnips to dairy, at 25 cents.....	126 50
	175 bushels beets, at 75 cents.....	131 25
1886.		
January....	35 bushels carrots, at 50 cents.....	17 50
	3 bushels spinach, at 50 cents.....	1 50
	40 bushels beets, at 50 cents.....	20 00
	476 stalks celery, at 6 cents.....	28 56
	50 bunches parsley, at 10 cents.....	5 00
	250 bushels beets to dairy, at 50 cents.....	125 00
	700 bushels turnips to dairy, at 35 cents.....	245 00
	1 double team and driver, 19 days, at \$4.....	76 00
	1 cart and driver, 8 days, at \$2.....	16 00
	1 man, 12 days, at \$1.25.....	15 00
February...	154 bushels parsnips, at 50 cents.....	77 00
	8 bushels salsify, at \$1.....	8 00
	74 bushels turnips, at 25 cents.....	18 50
	80 bushels beets, at 50 cents.....	40 00
	1 bushel spinach.....	1 00
	204 bushels beets to dairy, at 50 cents.....	102 00
	200 bushels turnips to dairy, at 25 cents.....	50 00
March.....	142 bushels parsnips, at 50 cents.....	71 00
	32 bushels salsify, at \$1.....	32 00
	170 bushels turnips, at 25 cents.....	42 50
	56 bushels kale, at \$1.50.....	84 00
	51 bunches parsley, at 5 cents.....	2 55
	244 bushels turnips to dairy, at 25 cents.....	61 00
	294 bushels beets to dairy, at 50 cents.....	147 00
	146 bushels carrots to dairy, at 50 cents.....	73 00
	168 bushels parsnips to dairy, at 50 cents.....	84 00
April.....	897 bushels kale, at 25 cents.....	99 25
	29 bushels spinach, at 50 cents.....	14 50
	3,200 bunches young onions, at 2 cents.....	64 00
	343 bunches asparagus, at 10 cents.....	34 30
	1,600 bunches rhubarb, at 3 cents.....	48 00
	35 bunches parsley, at 5 cents.....	1 75
	1 double team and driver, 6 days, at \$4 per day.....	24 00
May.....	1 cart and driver, 2 days, at \$2 per day.....	4 00
	1 double team and driver, 10 days, at \$4 per day.....	40 00
	1 man, 24 days, at \$1.25 per day.....	30 00
	3,328 bunches rhubarb, at 2 cents.....	66 56
	3,125 bunches asparagus, at 12½ cents.....	390 63
	5,600 bunches young onions, at 2 cents.....	112 00
	60 bunches radishes, at 2 cents.....	1 20
	3,400 heads lettuce, at 2 cents.....	68 00
June.....	49 bunches parsley, at 5 cents.....	2 45
	1,225 bunches asparagus, at 5 cents.....	61 25

Farm account from October 1, 1885, to September 30, 1886, &c.—Continued.

Cr.

1886.		
June.....	By 1,850 bunches rhubarb, at 3 cents.....	\$55 50
	62 bunches beets (young), at 3 cents.....	1 86
	675 bunches onions (young), at 2 cents.....	13 50
	28 bushels spinach at 75 cents.....	21 00
	45 bushels peas, at 75 cents.....	33 75
	10 bushels radishes, at \$1.....	10 00
	1,635 heads cabbage, at 5 cents.....	81 75
	3,400 heads lettuce, at 2 cents.....	68 00
	1 double team and driver, 3 days, at \$4 per day.....	12 00
July.....	1 cart and driver, 10 days, at \$2 per day.....	20 00
	1 double team and driver, 6 days, at \$4 per day.....	24 00
	1 man, 25 days, at \$1.25 per day.....	31 25
	795 bunches young onions, at 2 cents.....	15 90
	241 bunches asparagus, at 5 cents.....	12 05
	2 bunches parsley, 10 cents; 4 bushels cucumbers, \$4.....	4 10
	87 bushels beets, at 50 cents.....	43 50
	38 bushels snap beans, at 75 cents.....	28 50
	7 bushels squash, \$3.50; 2 bushels carrots, \$2.....	5 50
	8 bushels tomatoes, at 83½ cents.....	6 67
	56 bushels potatoe (new), at 91½ cents.....	51 34
	7,200 head cabbages, at 4½ cents.....	336 00
August.....	1,374 ears corn, at 2 cents.....	27 48
	4,756 heads cabbage, at 5 cents.....	237 80
	8,200 ears corn, at 1½ cents.....	123 00
	94 bunches parsley, at 5 cents.....	4 70
	37 canteloupes, at 8 cents, \$2.96; 2 bunches sage, 10 cents.....	3 06
	267 egg plants, at 2 cents.....	5 34
	5 bushels Lima beans, at \$2.....	10 00
	6 bushels okra, at \$1.50.....	9 00
	12 bushels carrots, at \$1.25.....	15 00
	51 bushels onions, at \$1.....	51 00
	7 bushels snap beans, at 50 cents.....	3 50
	101 bushels potatoes, at 75 cents.....	75 75
	48 bushels beets, at 75 cents.....	36 00
	10 bushels cucumbers, at \$1.....	10 00
	7 bushels squash, at 50 cents.....	3 50
	270 bushels tomatoes, at 50 cents.....	135 00
	1 double team and driver, 5 days, at \$4 per day.....	20 00
	1 man, 19 days, at \$1.25 per day.....	23 75
September.	270 tons hay, raised during the year, at \$15.....	4,050 00
	310 bushels tomatoes, at 58½ cents.....	180 83
	557 ears corn, at 1½ cents.....	8 36
	1,750 heads cabbage, at 5 cents.....	87 50
	1,200 canteloupes, at 8 cents.....	96 00
	42 bushels cucumbers, at 50 cents.....	21 00
	37 bushels beets, at 50 cents.....	18 50
	14 bushels carrots, at \$1.....	14 00
	42 bushels snap beans, at 50 cents.....	21 00
	19 bushels Lima beans, at \$2.....	38 00
	24 bushels peppers, at 50 cents.....	12 00
	19 bushels okra, at \$1.67.....	31 73
	358 egg plants, at 2½ cents.....	8 95
	100 bunches parsley, at 5 cents.....	5 00
	2 double teams and drivers, 14 days, at \$4 per day.....	112 00
	4 men, 26 days, at \$1.25 per day.....	130 00
	1 cart and driver, 16 days, at \$2 per day.....	32 00
Estimate of vegetables in the ground on the Soldiers' Home farm on the 1st day of October, 1886: 200 bushels carrots, 200 bushels parsnips, 800 bushels beets, 75 bushels salsify, 800 bushels white potatoes, 200 bushels turnips, 6,000 stalks celery, 500 pounds horse-radish, 12 tons winter squash.		
The prices of produce of the farm credited in this account were obtained from wholesale commission merchants in Washington City.		
Total.....		10,788 51

NOTE.—The farm has not been credited for grazing the cattle belonging to the dairy.

Dairy account, October 1, 1885, to September 30, 1886, United States Soldiers' Home, District of Columbia.

Dr.

1885.		
October....	To labor, citizens' roll.....	\$116 00
	Labor, extra-duty roll, September and October.....	5 00
	Herders, September and October.....	88 50
	Alderney milch cow.....	75 00
	Forage for dairy stock.....	51 00
	Forage for dairy horse, \$4.65; rations, \$17.42.....	22 07
November..	500 bushels turnips from farm, at 25 cents.....	125 00
	Rations, \$17.98; forage, \$4.50.....	22 48
	Labor, citizens' roll.....	116 00
	Forage for dairy stock.....	80 00
December..	1 water-cart.....	20 00
	506 bushels turnips from farm, at 25 cents.....	126 50
	175 bushels beets from farm, at 75 cents.....	131 25
	Forage for dairy horse.....	4 76
	Forage for dairy stock.....	119 25
	2 hand scrub-brushes.....	1 20
	3 manure forks, \$3.75; 8 short-handle shovels, \$3.....	6 75
	1½ pounds sponge, \$3.75; 2½ pounds manila rope, 40 cents.....	4 15
	Rations, \$18.21; registry of 8 calves, \$6.....	24 21
	Transfer of Duke of Harewood from Soldiers' Home to General George W. Getty.....	1 00
	Labor, citizens' roll.....	116 00
	Labor, inmates, herders, for November and December.....	77 30
1886.		
January....	Labor, citizens' roll.....	116 00
	Rations, \$17.98; forage for horse, \$5.....	22 93
	Forage for stock.....	167 00
	250 bushels beets from farm, at 60 cents.....	125 00
	700 bushels turnips from farm, at 35 cents.....	245 00
February..	204 bushels beets from farm, at 60 cents.....	102 00
	Forage for horse, \$5; forage for stock, \$308.51.....	311 51
	200 bushels turnips from farm, at 25 cents.....	50 00
	Labor, citizens' roll.....	116 00
	Rations.....	17 98
	Cattle herders, for January and February.....	38 35
March.....	244 bushels turnips from farm, at 25 cents.....	61 00
	294 bushels beets from farm, at 60 cents.....	147 00
	146 bushels carrots from farm, at 50 cents.....	73 00
	168 bushels turnips from farm, at 25 cents.....	42 00
	Forage for stock.....	450 12
	Forage for horse.....	4 00
	Rations, \$20; 1 wheelbarrow, \$4.....	24 00
	Labor, citizens' roll.....	116 00
April.....	Forage for stock, \$323.64; forage for horse, \$5.....	328 64
	Labor, citizens' roll, \$116; rations, \$17.76.....	133 76
	Cattle herders, March and April.....	36 40
May.....	Forage for stock, \$235.97; forage for horse, \$5.12.....	241 09
	25,350 pounds hay, in March, at 90 cents per 100 pounds.....	228 15
	Labor, citizens' roll, \$116; rations, \$19.88.....	135 88
June.....	Forage for horse, \$4.95; rations, \$17.82.....	22 77
	Labor, citizens' roll.....	116 00
	Labor, corporal in charge of herders, May and June.....	20 00
	Labor, herders, for May and June.....	54 90
July.....	Forage for horse.....	5 23
	1 sack salt, \$1.40; 5 pounds soda, 15 cents.....	1 55
	Rations.....	20 38
	Labor, citizens' roll.....	116 00
August....	Forage for horse, \$5.34; forage for stock, \$48.....	53 34
	Rations, \$20.33; labor, citizens' roll, \$116.....	136 33
	Labor, cattle herders, extra-duty roll.....	99 95
	6 tons red-ash range coal for the year, at \$4.95.....	29 70
	5 tons white-ash stove coal for the year, at \$5.70.....	28 50
	1½ cords wood for the year, at \$6.50.....	9 75
September..	Rations.....	20 20
	Labor, citizens' roll.....	119 00
	Forage for horse.....	4 65
	Forage for stock.....	48 00
	65 tons of hay from farm during the year, old crop, at \$21 per ton.....	1,365 00
	10 tons hay from farm during the year, new crop, at \$15 per ton.....	150 00
	Balance in favor of dairy.....	8,036 97
	Total.....	10,122 54

Dairy account, October 1, 1885, to September 30, 1886, &c.—Continued.

CR.

1885.		
October....	By 2,584½ gallons milk, at 30 cents.....	\$775 28
	1 cow sold at auction.....	23 40
November..	2,308½ gallons milk, at 30 cents.....	692 55
	1 bull calf sold.....	25 00
	1 calf sold to butcher.....	7 85
	1 bull sold at drove-yard.....	23 08
	Service of bull.....	5 00
December	2,299½ gallons milk, at 30 cents.....	689 78
	1 calf sold.....	8 12
1886.		
January...	2 calves sold.....	18 72
	2,217½ gallons milk, at 30 cents.....	665 33
February..	3 calves sold.....	23 00
	2,253 gallons milk, at 30 cents.....	675 90
	1 cow sold at drove-yard.....	23 07
March.....	2,074½ gallons milk, at 30 cents.....	622 28
April.....	2 cows sold at drove-yard.....	75 90
	4 calves sold to butcher.....	36 02
	2,226½ gallons milk, at 30 cents.....	667 95
May.....	4 calves sold to butcher.....	34 46
	3 calves sold to Mr. Childs.....	27 00
	2,513½ gallons milk, at 30 cents.....	764 13
June.....	2,459 gallons milk, at 30 cents.....	737 70
	2 calves sold.....	24 00
	1 calf sold.....	8 00
	Service of bull.....	5 00
July.....	2,849½ gallons milk, at 30 cents.....	854 93
	2 calves sold in June.....	14 55
	Service of bull.....	5 00
	2 calves sold.....	10 90
August....	3,170½ gallons milk, at 30 cents.....	951 15
	2 calves sold.....	20 00
September.	2,890 gallons milk, at 30 cents.....	867 00
	1 calf sold.....	14 00
	800 cart-loads manure to farm, at 50 cents.....	400 00
	18 tons of hay in barn not used, at \$21.....	336 00
	Total.....	10,122 54

NOTE.—No charge has been made for cattle grazing on the farm.

Stock on hand September 30, 1886.

	Cows.	Bulls.	Heifers.	Calves.
Holstein registered.....	4	1	2	2
Holstein grade.....	18		8	10
Alderney.....	17	1	3	4
Common.....	16			
Total.....	50	2	13	16
Sold during year.....	4	1		29
Died during the year.....	2		1	3

Average number of gallons of milk per cow per day for the year, 1½. The cost of milk per gallon was 20.95 cents.

Fruit and flower garden account, October 1, 1885, to September 30, 1886, United States Soldiers' Home, District of Columbia.

DR.

1885.		
October....	To labor, civilian roll.....	\$242 50
	Labor; extra-duty roll, September and October.....	17 25
	3,000 3-inch flower-pots, at \$6.50.....	19 50
	3,000 2-inch flower-pots, at \$6.....	18 00
	20 stanchions.....	28 25
	1½ bushels potatoes.....	1 12
November..	Labor, civilian roll.....	218 75
December..	do.....	248 25
	56 pounds marlin twine, at 18 cents.....	10 08
	10 pounds hank twine, at 40 cents.....	4 00
1886.		
January....	Labor, civilian roll.....	227 50
	1 gallon fir-tree oil.....	4 00
	10 pounds Virginia sulphur.....	85
	12 bars whale-oil soap.....	1 00
February..	1,000 4-inch flower-pots.....	10 00
	Labor, civilian roll.....	215 00
March.....	do.....	248 75
April.....	Plants and bulbs.....	48 50
	Labor, civilian roll.....	257 50
	Manure from G. A. Woodruff in March.....	232 50
May.....	1 bushel seed oats.....	1 00
	Labor, civilian roll.....	232 51
June.....	do.....	235 00
	Labor, extra-duty-roll, May and June.....	12 73
	3 No. 3 Ames shovels, at \$1.....	3 00
	3 14-tooth steel rakes, at 45 cents.....	1 35
	1 10-inch mill-saw file.....	60
	6 English scythes.....	6 60
	12 Scotch scythe-stones.....	1 20
	2 garden trowels.....	1 00
	500 pint berry boxes.....	5 00
	12 covered baskets.....	3 00
	4 blades for Champion mower.....	2 00
	6 spades, \$8; 6 hoes, \$2.10.....	8 10
	1 push-cart.....	15 00
	6 contractors' picks.....	6 00
July.....	Labor, civilian roll.....	233 56
	1 axe and handle.....	1 15
August....	Labor, civilian roll.....	214 79
	Labor, watchman.....	15 65
	Labor, extra-duty roll.....	16 05
September.	6 tons W. A. stove coal, for the year, at \$5.70.....	84 20
	19½ tons R. A. egg coal, for the year, at \$4.95.....	95 70
	Labor, civilian roll.....	228 25
	100 2-horse loads of manure from the Home stables, at \$2 per load.....	200 00
	Total.....	3,622 74

CR.

1886.		
June.....	By 2,340 quarts strawberries, at 8 cents.....	\$187 20
	780 quarts cherries, at 6 cents.....	46 80
	250 quarts currants, at 8 cents.....	20 00
July.....	185 quarts raspberries, at 11 cents.....	20 35
	1,800 quarts blackberries, at 7 cents.....	126 00
	140 quarts raspberries, at 8 cents.....	11 20
	14 pecks early pears, at 80 cents.....	11 20
August....	410 quarts blackberries, at 10 cents.....	41 00
	84 bushels pears, at \$1.50.....	51 00
	2 bushels grapes, at \$2.40.....	7 20
Sept.....	81 bushels pears, at \$2.....	162 00
	17 bushels grapes, at \$2.40.....	40 80
	Propagation of 25,000 plants, at 5 cents.....	1,250 00
	Balance against garden.....	1,647 99
	Total.....	3,622 74

*Statement of the Soldiers' Home permanent fund on deposit in the United States Treasury,
and the interest thereon, for the year ending September 30, 1886.*

October 1, 1885, balance.....		\$445,182 90
October 28, 1885, amount of deposits.....	\$11,622 91	
November 10, 1885, amount of deposits.....	3,141 67	
November 16, 1885, amount of deposits.....	4,022 88	
November 23, 1885, amount of deposits.....	3,252 38	
December 9, 1885, amount of deposits.....	10,144 64	
December 29, 1885, amount of deposits.....	7,807 15	36,891 53
		<hr/>
		483,074 43
Less amounts paid from permanent fund:		
October 24, 1885.....	8,000 00	
November 23, 1885.....	9,500 00	
December 23, 1885.....	8,000 00	25,500 00
		<hr/>
Balance remaining December 31, 1885.....		458,574 43
January 11, 1886, amount of deposits.....	4,140 68	
January 21, 1886, amount of deposits.....	10,410 93	
February 8, 1886, amount of deposits.....	20,824 57	
February 20, 1886, amount of deposits.....	34,828 71	
March 27, 1886, amount of deposits.....	12,924 54	
March 30, 1886, amount of deposits.....	1,000 00	83,927 41
		<hr/>
		540,501 84
Less amounts paid from permanent fund:		
January 21, 1886.....	2,000 00	
February 19, 1886.....	13,500 00	
March 24, 1886.....	16,500 00	32,000 00
		<hr/>
Balance remaining March 31, 1886.....		508,501 84
April 16, 1886, amount of deposits.....	15,814 50	
April 27, 1886, amount of deposits.....	3,500 21	
May 14, 1886, amount of deposits.....	15,987 02	
May 27, 1886, amount of deposits.....	8,017 26	
June 18, 1886, amount of deposits.....	11,514 38	
June 29, 1886, amount of deposits.....	11,272 74	65,606 11
		<hr/>
		574,107 95
Less amounts paid from permanent fund:		
April 24, 1886.....	14,000 00	
May 27, 1886.....	11,900 00	
June 23, 1886.....	18,350 00	44,250 00
		<hr/>
Balance remaining June 30, 1886.....		529,857 95
July 21, 1886, amount of deposits.....	11,280 93	
September 24, 1886, amount of deposits.....	13,648 38	
September 29, 1886, amount of deposits.....	8,246 25	33,176 06
		<hr/>
Less amount paid from permanent fund:		563,034 01
August 21, 1886.....	14,400 00	
September 22, 1886.....	19,870 00	34,270 00
		<hr/>
Balance remaining September 30, 1886.....		528,764 01
		<hr/>
INTEREST ACCOUNT:		
October 1, 1885, balance.....	\$3,421 90	
Interest on balance (\$445,182.90) October 1 to December 31, 1885.....	3,365 58	
Interest on deposits to December 31, 1885.....	122 07	\$6,909 55
		<hr/>
Less interest on principal paid (\$25,500).....		82 03
		<hr/>
		6,827 52
Less interest paid.....		3,421 90
		<hr/>
Balance due December 31, 1886.....		3,405 62
Interest on balance (\$458,574.43) January 1 to March 31, 1886.....	3,570 37	
Interest on deposits to March 31, 1886.....	295 53	3,865 90
		<hr/>
		7,077 52
Less interest on principal paid (\$32,000).....		67 84
		<hr/>
		7,009 68
Less interest paid.....		3,405 63
		<hr/>
Balance due March 31, 1886.....		3,604 05
Interest on balance (\$503,501.84) April 1 to June 30, 1886.....	3,893 59	
Interest on deposits to June 30, 1886.....	208 07	4,011 66
		<hr/>
		7,615 72
Less interest on principal paid (\$44,250).....		124 50
		<hr/>
		7,491 13
Less interest paid.....		3,604 06
		<hr/>
Balance due June 30, 1886.....		3,887 07

Interest on balance (\$529,857.95) July 1 to September 30, 1886	\$4, 005 73	
Interest on deposits to June 30, 1886	75 99	\$4, 081 72
		7, 968 79
Less interest on principal paid (\$34, 720)		63 23
		7, 905 56
Less interest paid		3, 887 07
Balance due September 30, 1886		4, 018 49

The treasurer of the United States Soldiers' Home, District of Columbia, in account with the inmate pensioners for moneys received under section 4, act approved March 3, 1883, and deposited with the Treasurer of the United States.

Date.	Received.	Amount.	Date.	Disbursed.	Amount.
1885.			1885.		
Oct. 1	To balance on hand Sep- tember 30, 1885	\$20, 856 27	Oct. 26	By amount paid the John Engel estate	\$20 00
20	To S. L. Willson's check	286 07	27	By amount paid the Jacob Dehl estate	25 00
Nov. 10	do.	101 47	31	By amount paid to pension- ers per abstract	1, 066 46
21	do.	235 73	Nov. 30	By amount paid the Thomas Doran estate	142 00
25	do.	205 40	30	By amount paid to pension- ers per abstract	537 47
Dec. 7	do.	10, 091 47	30	do.	7, 837 15
19	do.	436 06	Dec. 31	1886.	
26	do.	246 80	Jan. 31	do.	792 11
1886.			Feb. 28	do.	611 47
Jan. 27	do.	834 93	Mar. 31	do.	10, 870 25
Mar. 5	do.	11, 236 82	Apr. 30	do.	773 86
31	do.	709 93	May 31	do.	1, 081 73
Apr. 23	do.	217 53	June 30	do.	10, 638 69
May 29	do.	1, 292 07	July 31	do.	948 54
June 8	do.	9, 352 02	Aug. 31	do.	854 80
30	do.	924 81	Sept. 30	do.	10, 614 50
July 23	do.	490 51	30	By amount transferred to the Home fund, being due the estates of decess- ed pensioners and re- maining unclaimed for three years, in accord- ance with section 4, act approved March 3, 1883, per abstract and receipt of treasurer	220 80
Aug. 6	do.	63 40	30	By balance deposited with United States Treasurer.	21, 705 01
Sept. 6	do.	10, 394 55			
13	do.	90 00			
20	do.	174 00			
	Total	68, 239 84		Total	68, 239 84

Number of pensioners, inmates of the Home, September 30, 1886, who are paid by the treasurer; also rates of pension.

	Number.		Number.
Receiving:		Receiving:	
\$30 per month	13	\$8 per month	94
24 per month	19	6.25 per month	1
18 per month	1	6 per month	48
16 per month	15	5 per month	2
14 per month	16	4 per month	50
13 per month	1	3 per month	2
12 per month	60	2 per month	12
11 per month	1	1 per month	1
10 per month	30		
9 per month	4	Total	370

Number of pensioners, inmates of the Home, September 30, 1885	343
Gain by admission and readmission	179
Total	522
Loss by discharge	125
Loss by death	27
	152
Remaining September 30, 1886	370

A number of pensioners are included in the 179 admitted or readmitted, and the 125 discharged, who were both discharged and readmitted during the year.

There are 32 pensioners, inmates of the Home, who have assigned their pensions to child, wife, or parent, and are not included in the above enumeration, because payments are made in their cases directly through the United States pension agent, Washington, D. C.

The number of members of the Home, on "out-door relief," September 30, 1885, was 183. The maximum rate is eight dollars per month, and less rates represent an amount sufficient, with the pension received, to make an income of eight dollars per month. The number on the rolls September 30, 1886, was 231, of which 182 receive \$8, six receive \$6, two receive \$5, twenty-eight receive \$4, one receives \$2.66, and twelve receive \$2 per month.

REPORT OF THE ATTENDING SURGEON.

UNITED STATES SOLDIERS' HOME, DISTRICT OF COLUMBIA, September 30, 1886.

SIR: I have the honor to submit the following report of the medical department of the Home for the year ending September 30, 1886:

	1886.	1885.	1884.
Patients remaining in hospital from preceding year.....	85	81	78
Patients admitted during the year.....	260	317	287
Total.....	345	398	365
Of these there were—			
Returned to Home cured.....	110	.....	.....
Returned to Home relieved.....	71	.....	.....
Returned to Home not improved.....	52	.....	.....
Total returned to Home.....	233	269	252
Deserted (left without notice).....	2	1	2
Sent to United States Hospital for Insane.....	6	8	4
Died in hospital.....	80	81	26
Dead when brought to hospital.....	4	4	.....
Remaining in hospital at date of annual report.....	70	85	81
Total.....	345	398	365

The patients reported as cured were cases of acute diseases. Those reported as not improved were the subjects of chronic diseases in an advanced stage, such as phthisis, organic disease of heart, liver, or brain, locomotor ataxia, &c.

Ages of patients.

	1886.	1885.	1884.
Between 20 and 30 years.....	21	14	24
Between 30 and 40 years.....	49	46	49
Between 40 and 50 years.....	59	72	65
Between 50 and 60 years.....	66	105	88
Between 60 and 70 years.....	39	61	46
Between 70 and 80 years.....	24	16	13
Between 80 and 90 years.....	2	2	2
Total.....	260	317	287
Age of the youngest.....	23	22	24
Age of the oldest.....	88	85	81
Average age of the patients.....	49.66	51.21	33.39
Greatest number of patients in hospital at one time.....	86	86	85
Least number of patients in hospital at one time.....	64	77	65
Average number of patients each day of the year.....	71.23	83.39	79.75

Diseases for which patients were admitted.

Disease.	1886.	1885.	1886.	Disease.	1886.	1885.	1884.
Malarial fever	4	—	—	Asthma	5	2	1
Acute diarrhoea	6	7	5	Pulmonary consolidation	1	—	—
Chronic diarrhoea	1	3	2	Pulmonary oedema	1	—	—
Gonorrhoea	5	1	2	Inflammation of pleura	9	—	—
Tertiary syphilis	2	—	—	Valvular disease of heart	12	9	7
Stricture of rectum	1	—	—	Fatty degeneration of heart	1	—	—
Fistula, urethro-scrotal	1	—	—	Endo-carditis	1	—	—
Inebriation	19	109	50	Pericarditis	1	—	—
Delirium tremens	16	3	2	Aneurism of aorta	6	—	—
Acute rheumatism	4	12	4	Varicose veins	1	2	2
Chronic rheumatism	9	9	17	Cerebral meningitis	1	1	—
Senile debility	10	4	14	Softening of brain	1	—	—
Acute disease of liver	3	—	—	Injury to brain	1	—	—
Chronic disease of liver	6	—	—	Sciatica	2	—	—
Pulmonary consumption	23	13	12	Acute insanity	1	—	—
Acute inflammation of larynx	1	1	1	Simple dementia	6	—	—
Chronic inflammation of larynx	1	—	—	Epilepsy	2	2	10
Tubercular laryngitis	1	—	—	Neuralgia	4	6	2
Acute pharyngitis	1	—	—	Dyspepsia	2	6	1
Inflammation of lung	4	2	3	Synovitis	1	—	—
Acute bronchitis	2	4	2	Locomotor ataxia	12	5	1
Chronic bronchitis	8	6	12	Sprain	1	—	—
Apoplexy	1	1	—	Contusion	2	7	3
Albuminuria	1	—	—	Post nasal catarrh	1	—	—
Psoriasis	1	—	—	Chronic inflammation of middle ear	1	—	—
Colic	2	2	2	Dental caries	2	—	—
Hemiplegia	1	—	—	Bunion	1	—	—
Epididymitis	1	—	—	Carbuncle	1	2	2
Acute cystitis	1	—	—	Piles	3	1	5
Chronic cystitis	1	—	—	Dislocation of retina	1	—	—
Cancer of rectum	1	—	—	Cataract	1	1	—
Constipation	3	1	2	Retinitis	1	1	1
Ulcer	7	2	—	Amblyopia	1	—	—
Abscess	4	—	—	Neurotinitis	1	—	—
Wound, gun-shot, of head	1	—	—	Iritis syphilitic	1	—	—
Wound, lacerated, of face	1	—	—	Keratitis, interstitial	2	—	—
Fracture of clavicle	1	—	—	Total blindness	2	—	—
Fracture of ulna	1	—	—	Inguinal hernia	1	—	—
Fracture of patella	1	—	—	Opium habit	2	—	—
Fracture (old) of fibula	1	—	—	Other diseases	—	92	192
Dislocation of shoulder	1	—	—				
Dislocation (old) of knee	1	—	—				
Necrosis	2	—	—				
Erysipelas	1	—	—				
				Total	260	317	287

This list exhibits only the diseases complained of by the patients at the time of their admission to the hospital. The majority of them were also the subjects of other diseases, generally chronic and incurable.

During the year the following surgical operations were successfully performed in the hospital, viz: Cataract (extraction of lens), entropion (operation for), amputation of penis (cancer), amputation of testicle (cancer), external perineal urethrotomy.

Recent fractures of the following named bones were also treated, viz: Clavicle, ulna, patella; also, dislocation of head of humerus.

Causes of death.

Diseases.	1886.	1885.	1884.	Diseases.	1886.	1885.	1884.
Phthisis pulmonalis	6	9	8	Cerebral meningitis	2	2	—
Pneumonia	2	—	—	Softening of brain	1	—	—
Pleuro-pneumonia	1	—	—	Fracture of skull (found dead)	1	—	—
Chronic bronchitis	4	2	—	Cirrhosis of liver	1	1	—
Oedema of glottis and general debility	1	—	—	Chronic hepatitis	1	—	—
Heart failure	1	—	—	Lardaceous degeneration of kidneys	1	—	—
Heart clot (found dead)	1	—	—	Septicæmia	1	—	—
Fatty degeneration of heart	1	—	—	Drowning (suicidal)	1	1	—
Valvular disease of heart	4	5	2	Morphia poisoning (suicidal)	1	—	—
Aneurism aortic (compressing trachea)	1	—	—	Deaths from other causes	—	15	16
Rupture of aortic aneurism	1	—	—				
Cerebral congestion	1	—	—	Total	34	35	28

Of these 34 decedents, 4 were dead and 5 moribund when brought to the hospital (the latter having died within 36 hours after admission). In at least 6 cases death was caused or hastened by excessive indulgence, on the part of the decedents, in alcoholic liquors. Three of the deaths are believed to have been suicidal.

Nativity of decedents.

	1886.	1885.	1884.
Ireland.....	14	12	11
Germany.....	8	11	1
United States.....	7	9	9
England.....	4	1	0
France.....	1	1	5
Wales.....	0	1	0
Total.....	34	35	26

Prescriptions and sick-calls.

	1886.	1885.	1884.
Prescriptions and renewals of same.....	15,431	16,804	11,871
Treated at sick-call and in quarters.....	2,619	2,972	6,197

Daily average number of inmates present at the Home during the year ending September 30, 1886..... 626

Proportion of deaths to 100 inmates per annum.

Year.	Percent.	Year.	Percent.	Year.	Percent.
1880.....	5.48	1884.....	5.42	1882.....	6.05
1885.....	6.12	1883.....	7.08	1881.....	9.50

From this report it will be seen that, while the number of inmates of the Home was materially increased, there was a marked decrease in the number of patients admitted to hospital during the year, as compared with the two preceding years. The death-rate has also fallen off, being 5.43 per 100 inmates this year, against 6.12 last year. These results are probably accidental, and by no means prove that the usual average has been permanently changed.

The drainage system of the hospital appears to be in good order, and answers the purpose for which it was designed; but the plumbing of the 4 bath-rooms, and 4 lavatories, and 6 water-closets attached to the different wards is not in good condition. Repairs are constantly made, but with only temporary benefit, and much inconvenience results. It will soon be necessary to remove most of this plumbing and to replace it with new material.

The apparatus for heating the hospital is sufficient for that purpose in ordinary winter weather; but last winter (which was exceptionally cold) it was found impossible to warm the two upper wards, and many patients suffered from cold in consequence. I have therefore concluded to ask that one large heating stove be placed in each of the wards referred to, as a precaution against the discomforts experienced last winter.

The food supply has been all that could be desired, both as to quantity and quality. That very important branch of hospital administration, the culinary department, is still in an unsatisfactory condition.

I have been fortunate in finding a sober and fairly good "soldier cook" among the inmates of the Home, but it need hardly be said that there is not among the inmates a cook who is capable of properly preparing the special diet and delicacies which many of the patients absolutely need, and without which they cannot be said to be suitably cared for.

In the following table will be found a statement of the cost of maintaining the medical department of the Home during the last three years. In some instances the figures there given are merely an approximation, but it is not believed that the exact sums, if obtainable, would materially alter the result.

Cost of Medical Department, United States Soldiers' Home, for the year ending September 30, 1886.

[Figures taken from records of treasurer's office.]

Articles.	1886.	1885.	1884.
Average number of men, including attendants	100.23	111.47	108.70
Subsistence	\$10,128 23	\$11,158 19	\$11,091 40
Subsistence inmates at United States Government Insane Asylum	2,008 57	1,241 43	.....
Cost of medicines	1,051 62	1,570 72	1,493 97
Attendants	3,964 35	3,592 95	4,264 50
Ice	229 26	372 80	257 53
Fuel	1,742 63	1,494 10	1,878 48
Gas	750 25	688 75	551 55
Laundry	691 14	767 44	775 80
Furniture	80 00	189 21	1,247 54
Stationery	48 00	77 70	123 82
Teeth (\$147) and spectacles (\$80.47)	227 47	98 60	117 00
Coffins	141 02	148 15	182 26
Removal of night-soil	150 00	116 87	50 00
Newspapers	132 00	126 00	144 00
Bedding	283 60	39 35	576 04
Repairs (approximated)	487 46	428 76	1,002 67
Forage for ambulance horses (approximated)	120 75	168 33	184 30
Medical books	28 00	116 70	135 86
Trusses	67 00	.....	.....
Instruments	160 00	.....	.....
Miscellaneous	202 63	1,705 00	25 00
Total	22,594 06	24,101 05	24,001 97
Cost per man per day .....	.5901	.5924	.6056

Owing to the frequent changes occurring in the *personnel* of both patients and attendants, it has not been found practicable to even approximate the cost of the clothing chargeable to them while in hospital; moreover, it is questionable if this item of clothing can properly be included in an estimate of hospital expenses. For these reasons it has been omitted from the foregoing statement.

Very respectfully, your obedient servant,

C. C. BYRNE,

Surgeon United States Army, Attending Surgeon.

The GOVERNOR OF THE HOME.

List of names, &c., of men admitted to the benefits of the United States Soldiers' Home, District of Columbia, during the year ending September 30, 1886.

Number.	Name.	Last served in—		Service.			Date admitted.	Entitled by—
		Company.	Regiment.	Years.	Months.	Age when admitted.		
							1885.	
1	Meredith Gilmore	C	Twenty-second Infantry	5	4	34	Oct. 2	Disability.
2	Benjamin Davis	G	Twenty-fifth Infantry	21	...	42	Oct. 2	Service.
3	John C. English	A	First Cavalry	2	5	23	Oct. 10	Disability.
4	John Brady	D	Second Infantry	9	...	70	Oct. 14	Do.
5	Patrick Cain *	B	Second Artillery	18	6	41	Oct. 16	Do.
6	Philip Sexton	H	Twentieth Infantry	24	10	50	Oct. 17	Service.
7	Daniel Murray	E	Sixth Infantry	8	3	32	Oct. 19	Disability.
8	John D. Frost	M	Fourth Artillery	3	...	52	Oct. 19	Do.
9	Richard Corbett	M	Second Artillery	29	9	47	Oct. 19	Service.
10	Louis Seidel	A	Engineers	21	2	38	Oct. 19	Do.
11	Thomas W. Ryan	H	Sixteenth Infantry	3	3	44	Oct. 19	Disability.
12	Owen Flood	E	First Infantry	12	...	45	Oct. 19	Do.
13	Frederick J. Stokes	I	First New York Volunteers ..	1	3	...	Oct. 20	Do.
14	Patrick Mangan	H	Second Artillery	19	9	51	Oct. 22	Do.
15	David Jones .....	...	Commissary sergeant	21	5	52	Oct. 23	Service.
16	Charles Honig	C	Thirteenth Infantry	2	5	46	Oct. 24	Disability.

* Died since admission.

List of names, &c., of men admitted to the benefits of the United States Soldiers' Home District of Columbia, &c.—Continued.

Number.	Name.	Company.	Last served in— Regiment.	Service.			Date admitted.	Entitled by—
				Years.	Months.	Age when admitted.		
							1885.	
17	Edward Reiff.....	A	Fifth Infantry.....	9	1	47	Nov. 2	Disability.
18	William F. Yost.....	M	Third Artillery.....	22		47	Nov. 5	Service.
19	John Riley.....		General service.....	13	9	37	Nov. 6	Disability.
20	Daniel Guthrie.....	L	Eighth Cavalry.....	15		36	Nov. 7	Do.
21	John Barrett.....	H	Twenty-third Infantry.....	21		41	Nov. 7	Service.
22	John C. O'Neal.....	G	Fourth Cavalry.....	20	3	50	Nov. 9	Do.
23	Joseph Ernst.....	I	Seventeenth Infantry.....	4	5	29	Nov. 9	Disability.
24	Doctor F. Doster.....	I	Fourth Artillery.....	1	10	28	Nov. 19	Do.
25	Thomas Kelly.....	K	Twenty-second Infantry.....	21	9	48	Nov. 19	Service.
26	George Sanders.....		General service.....	19	2	45	Nov. 19	Disability.
27	William R. Hawkins.....	G	Forty-second Infantry.....	5	8	44	Nov. 23	Do.
28	William Schrader.....	E	First Cavalry.....	21		53	Nov. 23	Service.
29	Thomas Welch.....		General service.....	22	1	42	Nov. 23	Do.
30	George Cronk.....		Ordinance.....	22	2	43	Nov. 23	Do.
31	Henry Blackburn.....		General recruiting service.....	20	1	37	Nov. 23	Do.
32	John Dolan.....	F	Second Cavalry.....	3		45	Nov. 23	Disability.
33	Thomas O'Neill.....	A	First Cavalry.....	4	6	29	Nov. 24	Do.
34	Benjamin F. Dempsey.....	I	First Dragoons.....	4	3	56	Dec. 2	Do.
35	Jeffrey Carney*.....	F	Sixth Infantry.....	31	1	49	Dec. 3	Service.
36	Burr Hilton.....	K	Seventh Cavalry.....	1	4	30	Dec. 5	Disability.
37	John Kelly†.....	E	Fifth Cavalry.....	4	5	35	Dec. 9	Do.
38	Charles Ott.....	B	Fourth Infantry.....	27	6	45	Dec. 10	Service.
39	Edward Beckett.....		Hospital steward.....	10	10	37	Dec. 14	Disability.
40	Aaron Smith.....	G	Fifth Infantry.....	22	6	51	Dec. 15	Service.
41	Max Lehman.....	D	Third Artillery.....	7		33	Dec. 16	Disability.
42	Nelson Hough.....	K	Ninth Infantry.....	21	10	50	Dec. 19	Service.
43	John James.....		General service.....	13	8	47	Dec. 21	Disability.
44	John C. Lucas.....	E	Second Infantry.....	1	1	45	Dec. 22	Do.
45	William Callaghan.....	C	Eighth Cavalry.....	8		40	Dec. 22	Do.
46	Franz Schafermeier.....	H	Nineteenth Infantry.....	22	4	53	Dec. 22	Service.
47	James Graham.....	A	Fourth Infantry.....	19	10	48	Dec. 22	Disability.
48	Henry Cake.....		General service.....	21		48	Dec. 22	Service.
49	Andrew C. Hoffmeister.....	C	Thirtieth Infantry.....	2	9	47	Dec. 26	Disability.
50	Malcolm G. Brenholtz.....	I	Second Artillery.....	2	1	35	Dec. 28	Do.
51	Giovani Perigo.....		Seventh Infantry.....	22	5	58	Dec. 30	Service.
							1888.	
52	Henon Proctor.....	G	Third Cavalry.....	1	1	25	Jan. 2	Disability.
53	Peter Aller.....	D	Second Infantry.....	12	1	52	Jan. 2	Do.
54	John Steck.....	F	Twentieth Infantry.....	7	7	32	Jan. 11	Do.
55	Bernard Moran.....	E	Third Artillery.....	1	1	35	Jan. 14	Do.
56	John Hayes.....	C	Second Infantry.....	3	4	30	Jan. 17	Do.
57	Albert Branch.....	D	Fifth Cavalry.....	9		35	Jan. 18	Do.
58	William Morter.....	H	Twenty-first Infantry.....	21	1	46	Jan. 19	Service.
59	John Connor.....		Hospital steward.....	15		50	Jan. 19	Disability.
60	John Burk.....	G	Fourth Cavalry.....	5		33	Jan. 23	Do.
61	Henry Padrutt.....	I	do.....	1	10	23	Jan. 25	Do.
62	Stewart E. Henderson.....	F	First Cavalry.....	3		44	Feb. 1	Do.
63	Patrick J. Cleary.....	A	Eighteenth Infantry.....	2	7	44	Feb. 1	Do.
64	Paul Kraemer†.....	H	Fourteenth Infantry.....	30	1	54	Feb. 13	Service.
65	Henry S. Kirwan.....	C	Engineers.....	10	5	42	Feb. 13	Disability.
66	William H. Frates.....	H	Fourth Artillery.....	17		39	Feb. 18	Do.
67	Christian Zimmerman.....		General service.....	20	9	44	Feb. 20	Service.
68	Henry N. Washburn*.....	H	Third Cavalry.....	19	4	51	Feb. 22	Disability.
69	Patrick White.....	B	Fourth Infantry.....	20	7	39	Feb. 23	Service.
70	John Hogan.....	E	Third Artillery.....	2	9	62	Feb. 23	Disability.
71	Patrick Carpenter.....		Ordinance.....	15		72	Feb. 23	Do.
72	James Kennedy.....	H	Twelfth Infantry.....	20	5	49	Feb. 23	Do.
73	Valentine Fortner.....	L	Third Artillery.....	13		45	Feb. 23	Do.
74	Jacob Gasho.....		Ordinance.....	22	2	51	Mar. 1	Service.
75	Lucian B. Gould.....	H	First Infantry.....	2	8	54	Mar. 8	Disability.
76	Edward Morris.....	A	First Artillery.....	3	11	27	Mar. 9	Do.
77	John H. Dahl.....	C	Twenty-third Infantry.....	7	10	46	Mar. 15	Do.
78	Peter McMillan.....	G	First Artillery.....	20	1	45	Mar. 18	Service.
79	Robert Hunt*.....		Ordinance.....	37	7	66	Mar. 18	Do.
80	Michael Powell*.....	H	Second Artillery.....	35	11	56	Mar. 19	Do.
81	William Watson.....	M	do.....	3	6	45	Mar. 23	Disability.
82	Seinar Grimm*.....	B	First Artillery.....	31	8	55	Mar. 21	Service.
83	Thomas Hoban.....	E	Seventh Infantry.....	20	2	52	Mar. 23	Do.
84	Daniel D. Cameron.....	K	Eighth Infantry.....	9		36	Mar. 23	Disability.
85	William Langenberg.....	H	Twenty-second Infantry.....	24	1	65	Mar. 23	Service.
86	John Hannin.....	E	Second Artillery.....	23	9	52	Mar. 23	Do.
87	Arthur Hassett.....	F	Fifteenth Infantry.....	20	1	56	Mar. 23	Do.

* Died since admission.

† Retired soldiers.

List of names, &c., of men admitted to the benefits of the United States Soldiers' Home, District of Columbia, &c.—Continued.

Number.	Name.	Company.	Last served in— Regiment.	Service.		Age when admitted.	Date admitted.	Entitled by—
				Years.	Months.			
							1886.	
88	George W. Rager	E	Eleventh Infantry	1	5	60	Mar. 23	Disability.
89	Patrick Dorsey	A	Second Artillery	20	5	49	Mar. 23	Service.
90	James A. Rapp	A	do	5	5	63	Mar. 23	Disability.
91	Fred. Moody	C	Second Infantry	2	1	22	Mar. 24	Do.
92	Thomas Williams	C	Third Infantry	2	9	61	Mar. 24	Do.
93	Michael Moloney†	G	Fourth Artillery	30	—	52	Apr. 3	Service.
94	John Johnson	D	Fifth Cavalry	—	9	26	Apr. 5	Disability.
95	Thomas Murnane	I	do	12	8	35	Apr. 16	Do.
96	William Clark	—	Second Artillery	16	5	49	Apr. 18	Do.
97	John V. Nolan	G	Ninth Infantry	1	4	29	Apr. 16	Do.
98	Charles Kavanagh	L	Third Artillery	14	10	45	Apr. 16	Do.
99	John A. Pell	L	First Artillery	21	4	57	Apr. 22	Service.
100	John Eldridge	I	Third Artillery	2	4	25	Apr. 25	Disability.
101	George H. Miller	H	Sixth Cavalry	1	3	29	Apr. 23	Do.
102	James Ryan	F	Second Infantry	14	10	66	Apr. 26	Do.
103	William H. Clark	—	Ordnance	21	10	51	Apr. 23	Service.
104	Christian Faist	B	Eleventh Infantry	12	10	55	Apr. 23	Disability.
105	William Ryan	E	First Infantry	4	2	57	Apr. 23	Do.
106	Louis Bardy	E	Fourteenth Infantry	24	4	56	Apr. 23	Service.
107	William C. Stair	K	Seventh Cavalry	2	—	43	Apr. 23	Disability.
108	Mathias Hastings	A	Twentieth Infantry	19	11	44	Apr. 23	Do.
109	Henry Alden	E	Nineteenth Infantry	15	—	40	Apr. 23	Do.
110	Lawrence Dean	D	Second Artillery	12	11	40	Apr. 23	Do.
111	Paul Goetz	E	Fifth Cavalry	1	6	23	Apr. 23	Do.
112	Joseph N. Smith	E	Nineteenth Infantry	—	11	44	Apr. 23	Do.
113	Edgar Griffith	—	General service	16	6	40	Apr. 23	Do.
114	John E. Lawrence†	E	Seventeenth Infantry	30	—	54	May 5	Service.
115	William F. Olberg	I	Eighth Cavalry	3	2	29	May 6	Disability.
116	John Riley	C	First Cavalry	3	8	28	May 7	Do.
117	Richard Groebe	B	Sixth Cavalry	2	11	30	May 7	Do.
118	Thomas Tierney	M	Second Cavalry	2	3	28	May 14	Do.
119	Thomas Freeman	B	Second Infantry	14	4	66	May 15	Do.
120	John C. Schantz	—	Ordnance	17	6	41	May 18	Do.
121	John H. Mason*	D	Tenth Cavalry	10	10	40	May 18	Do.
122	James Stevenson	F	Ninth Infantry	18	—	49	May 18	Do.
123	Patrick Joyce	—	General service	7	11	36	May 18	Do.
124	Jacob Bender	E	Second Artillery	23	9	52	May 18	Service.
125	Richard Jackson	C	Fifth Cavalry	2	10	30	May 18	Disability.
126	Edward Slaughter	F	Sixteenth Infantry	20	3	42	May 18	Service.
127	George Portman	H	Twenty-second Infantry	28	—	53	May 18	Do.
128	Edward Ludwig	C	Seventh Infantry	4	2	30	May 24	Disability.
129	Francis Johnson	C	Tenth Infantry	18	8	50	May 24	Do.
130	John DeWagner†	C	Second Artillery	30	2	61	May 29	Service.
131	Daniel Heffernan	H	Thirteenth Infantry	2	4	25	June 4	Disability.
132	Peter Kelly†	G	Third Infantry	30	—	60	June 8	Service.
133	William Jenifer	A	Ninth Cavalry	16	5	39	June 16	Disability.
134	Harry Le Bordel	D	First Cavalry	1	6	27	June 22	Do.
135	Frank B. King	M	Third Cavalry	2	—	42	June 22	Do.
136	John Winkler	H	Fifth Cavalry	4	8	30	June 22	Do.
137	William Watson	I	do	4	—	32	June 22	Do.
138	William J. Doyle	A	Eighth Cavalry	4	2	30	June 22	Do.
139	Willie F. Glaubrecht	F	do	1	8	23	June 22	Do.
140	Robert W. Stevens	L	First Artillery	21	9	58	June 22	Service.
141	Joseph Thuringer	M	do	2	1	52	June 22	Disability.
142	Phillip Fisher	I	Second Infantry	7	2	50	June 22	Do.
143	William Rand	I	Fifth Infantry	26	—	57	June 22	Service.
144	John Conway	E	Twelfth Infantry	5	2	54	June 22	Disability.
145	George A. Cooper	E	Fifteenth Infantry	4	—	59	June 22	Do.
146	Michael McMahon	F	Sixteenth Infantry	18	5	43	June 22	Do.
147	Dennis Kavanagh	B	Nineteenth Infantry	21	6	50	June 22	Service.
148	John Kennedy†	—	Ordnance	20	8	49	June 22	Do.
149	William A. Swigart	G	Second Artillery	4	9	33	June 22	Disability.
150	Charles H. Bostick	C	Third Artillery	—	4	60	June 22	Do.
151	Antonio Guerrero	D	First Louisiana Volunteers	—	7	59	June 22	Do.
152	James Whelan	K	Fifth Infantry	20	—	44	June 24	Service.
153	Daniel C. Frizelle	F	Fourteenth Infantry	9	8	42	June 25	Disability.
154	Julius Stockins	C	Fourth Infantry	5	7	31	June 28	Do.
155	Peter Ackler	F	Ninth Infantry	1	4	59	June 30	Do.
156	John McQuillan†	F	First Artillery	30	10	53	July 6	Service.
157	Thomas Cole	B	Second Artillery	2	9	38	July 7	Disability.
158	William Beerhorst	—	General service	20	—	66	July 9	Service.
159	James B. G. McMurray	—	do	5	5	27	July 12	Disability.

* Died since admission.

† Retired soldiers.

List of names, &c., of men admitted to the benefits of the United States Soldiers' Home, District of Columbia, &c.—Continued.

Number.	Name.	Company.	Last served in— Regiment.	Service.		Age when admitted.	Date admitted.	Entitled by—
				Years.	Months.			
							1888.	
160	John Brookman.....	E	Eighteenth Infantry.....	1	1	27	July 15	Do.
161	William M. Proctor.....	I	First Cavalry.....	1	4	22	July 20	Do.
162	William C. Maxwell*.....	A	Fourth Artillery.....	4	7	31	July 20	Do.
163	Thomas Jackson.....	I	Fifth Infantry.....	17	7	43	July 20	Do.
164	Stephen Hall.....	A	Eighth Cavalry.....	1	8	27	July 20	Do.
165	Frank Feuerstein.....	F	Twenty-third Infantry.....	15	5	47	July 20	Do.
166	Arthur A. O'Keeffe.....		General mounted service.....	25	2	50	July 20	Service.
167	Franz Pinn*.....	B	Fifth Artillery.....	1	7	30	July 20	Disability.
168	Burritt N. Birge.....	L	Third Artillery.....		11	38	July 20	Do.
169	Henry Boyle.....	C	Engineers.....	21		43	July 20	Service.
170	Robert M. Landy.....	M	Third Artillery.....	7	5	29	July 20	Disability.
171	David Collins.....	B	First Tennessee Volunteers.....		6		July 20	Do.
172	John McCormick.....	E	Eighteenth Infantry.....	26	11	50	July 24	Service.
173	Lawrence Murphy.....	K	Second Cavalry.....	14	6	37	July 29	Disability.
174	Michael Fitzgerald.....	I	Seventh Infantry.....	5	8	58	July 30	Do.
175	George Williams.....	I	Third Cavalry.....	4	11	33	Aug. 1	Do.
176	Joseph Collins†.....	H	Second Artillery.....	30	1	52	Aug. 5	Service.
177	Peter Blumenberg†.....	E	Fourth Artillery.....	29	11	54	Aug. 7	Do.
178	Jacob Rubenstein.....	B	Seventh Cavalry.....		6	24	Aug. 10	Disability.
179	Philipp Cline.....		Second Infantry.....	14	1	45	Aug. 11	Do.
180	Henry Thomas*.....	H	Second Artillery.....	1	7	29	Aug. 16	Do.
181	Francis O'Connor†.....	B	Second Cavalry.....	30	10	54	Aug. 23	Service.
182	Alexander Yates.....	H	Seventh Cavalry.....	20	4	42	Aug. 23	Do.
183	John O'Brien.....	I	Fourth Artillery.....	17	1	40	Aug. 23	Disability.
184	Richard Thompson.....	D	Twelfth Infantry.....	3	9	29	Aug. 23	Do.
185	James Burk.....	G	Fifth Artillery.....	19	4	40	Aug. 23	Do.
186	Henry B. Meakins.....	I	Third Infantry.....	25		56	Aug. 23	Service.
187	Frederick Welbezah†.....	F	Second Artillery.....	8	3	54	Aug. 23	Disability.
188	George Sherer.....	F	Fourth Artillery.....	23	8	57	Aug. 23	Service.
189	Theodore Stern.....	H	do.....	19	9	50	Aug. 23	Disability.
190	Thomas Dowd.....		Commissary sergeant.....	24		50	Aug. 23	Service.
191	Valentine Murbeck.....		General service.....	21		43	Aug. 23	Do.
192	Hugh M. Swick.....		Signal Corps.....	21	1	51	Aug. 25	Do.
193	Abasalom W. Blakeburn.....	I	First Cavalry.....	20	8	46	Aug. 30	Do.
194	Thomas F. Stanford†.....		Seventh Infantry.....	35	5	48	Sept. 2	Do.
195	Michael Hayden.....	F	Fourth Infantry.....	12		51	Sept. 2	Disability.
196	Joseph J. Coonan.....		Ninth Infantry.....	1	1	30	Sept. 10	Do.
197	William Grable.....	E	Second Artillery.....		11	24	Sept. 14	Do.
198	Thomas Stutterd.....		Ordnance.....	6	8	60	Sept. 18	Do.
199	William Phelan.....	I	Second Infantry.....	6	9	32	Sept. 20	Do.
200	William Wolter†.....	A	Second Artillery.....	21	4	57	Sept. 21	Service.
201	John Clare.....	K	Thirteenth Infantry.....	6	7	29	Sept. 22	Disability.
202	Robert Sturm.....	C	Engineers.....	11	9	44	Sept. 22	Do.
203	Adolph Possien.....	K	First Artillery.....	19	6	43	Sept. 22	Do.
204	Thomas Tracy.....	F	Forty-third Infantry.....	6	4	48	Sept. 22	Do.
205	William Heyn.....		General service.....	12	4	50	Sept. 22	Do.
206	Andrew J. Pitcher.....	G	Second Cavalry.....	13	8	54	Sept. 22	Do.
207	William Johnson.....	C	Third Cavalry.....	21	10	59	Sept. 28	Service.
208	Thomas Casey†.....	E	Third Artillery.....	30	3	59	Sept. 28	Do.

* Died since admission.

† Retired soldiers.

REPORT OF THE INSPECTOR-GENERAL, U. S. ARMY, ON THE SOLDIERS' HOME, WASHINGTON, D. C.

WAR DEPARTMENT, INSPECTOR-GENERAL'S OFFICE,
Washington, D. C., October 16, 1886.

SIR: I have the honor to submit my report of an inspection of the Soldiers' Home, Washington, D. C., made September 21, 1886, pursuant to an act of Congress approved March 3, 1883.

IMPROVEMENTS.

At the date of the last annual report, made by Inspector-General N. H. Davis, August 31, 1885, there was in process of construction an annex or extension to the barrack buildings of the Home, quite a large structure built of brick. This has been completed during the year, and is now occupied. There has likewise been erected a brick extension to the stables at the dairy. Both of these are useful and important permanent works.

A substantial stone bridge, at the crossing of one of the main drives over a ravine, has been built, and also a large well, to increase the water supply of the post. A considerable sum has likewise been expended on drive-ways and gutters, which the heavy rains of last spring had damaged, and in the repair of walls and fences that had become dilapidated from long standing.

At the beginning of the year the grounds generally needed much repair; now they are in excellent condition, and, if nothing unforeseen occurs, very little expenditure will be required to keep them as they now are.

One new bridge, costing about \$200, will have to be built, made necessary in consequence of the new city reservoir, having raised the level of water in a small stream that is crossed by one of the roads.

Another addition to the barrack buildings has been talked of, but the question of its erection has not yet, as I understand, been acted upon by the Board of Managers. This addition is made necessary from the rapid increase in the number of persons claiming the privileges of the Home, to which they are entitled, and from the fact that even now a large number, who have a right to enter the Home, are excluded for the want of room to accommodate them. The building contemplated would cost, it is thought, \$150,000. It must be built in the near future, and it will be a part of the permanent plant of the institution.

INMATES.

Inmates of the Home August 31, 1885, present and absent.....	805
Admitted since.....	504
Total	1,309

Of these, forty-five have died and three-hundred and twenty-one have left voluntarily, leaving nine hundred and forty-three present and absent at the date of my inspection, as follows:

There were present.....	664
Absent on furlough	41
On suspension	
In insane asylum	6
Commuters outside of the Home.....	226
Total.....	943

These commuters are men entitled by law to the privileges of the Home should they claim the right to enter; but with the present accommodations they could not all be taken in. They remain at their homes outside, generally by preference, and they receive from the Home, monthly, a sum of money which, taken in connection with any pension allowance they may have, will amount to \$8, just what it would cost to feed them in the Home. If the man's pension is greater than \$8 he gets nothing, although entitled to live in the Home if there was room for him and he wished to do so.

ADMINISTRATION.

The direct management of the Home is in the hands of the same officers who conducted its affairs a year ago, Bvt. Maj. Gen. H. J. Hunt, United States Army (retired) being the governor.

The administration has been faithful and efficient, and the establishment has worked its way along in an orderly and quiet manner, in accordance with existing orders and regulations, and I have discovered nothing to invite the interference of the Secretary of War or the exercise of his authority.

POLICE.

I found the police of the grounds and buildings, of the hospital, the barracks, the mess-room, and kitchen to be excellent. The food is as good, in quantity and variety, as could be reasonably expected. The general health of the men, considering the age and infirmities of many of them, is good, and they are as contented as men so situated could be.

I believe there are other localities, like that of the Volunteer Soldiers' Home at Hampton, Va., where more to divert the minds and more contentment could be found, but no reasonable complaint can be made regarding this establishment as a refuge for old men.

THE LIBRARY.

The library and reading-room is a source of much comfort and enjoyment to many of the inmates. It contains 4,085 volumes, an increase of 364 since last year, and only 33 volumes have been lost or worn out. The average daily issue of books is 61 volumes.

THE FARM, THE DAIRY, THE GARDEN.

There are three industries, conducted for the benefit of the Home, which deserve notice. They are the farm, the dairy, and the garden. An accurate detailed account of the cost of running each of these, and of the profit each has yielded, has been kept, and these accounts are given in full in the report of the treasurer.

It will be seen that the farm has yielded a profit, over and above expenses of every kind, of \$1,481.75.

The dairy has produced \$4,724.36 more than it has cost, while the garden has cost \$1,080.26 more than it has yielded in value.

The working of the garden has cost \$3,452. It has produced fruits and berries, consumed by the inmates, valued at \$1,372.63, and plants to ornament the grounds, valued at \$1,000, leaving a deficit of \$1,080.26. It may be said that the cultivation of these plants is not a necessity but, so long as the grounds of the Home are left open to the public some degree of ornamentation seems necessary, and the cultivation of

these plants is only incidental to and adds but little to the cost of the production of the fruit, the labor required for one being able to produce the other. If the garden should be abolished, the men would be without the fruit, unless it might be purchased out of the funds of the Home. I do not think this expenditure an unreasonable one, provided the entire expenses of the establishment do not exceed its income.

FINANCES.

There is but one matter relating to the affairs of the Home which I feel called upon to bring specially to the notice of the Secretary of War, and to invite his careful consideration thereto. It is that of the financial condition of the institution, and its capability of being maintained, as it now is, with an anticipated increase in the number of inmates upon the revenue which it has or any it can expect to have.

As is well known, with the exception of a sum of money set apart for the purpose after the close of the Mexican war, the only source of revenue for the establishment and maintenance of the Home has been a deduction of \$1.50 each year from the pay of every enlisted man in the Army, withheld by the paymaster and covered into the Treasury, together with the amount of all fines and forfeitures imposed upon soldiers by sentence of military courts. There are a few other unimportant sources of supply, which need not be considered.

With 25,000 men in the Army, the amount deducted from soldiers' pay would be \$37,500; the amount coming from fines and forfeitures in any one year has never been determined, so far as I can ascertain, and is only a matter of conjecture.

As the aggregate from this last source must be nearly the same in each year, if it could be ascertained for one, the officers of the Home could approximate quite closely to the amount they would be authorized to spend, as coming from this source.

Inasmuch as the officials of the Treasury Department, in whose hands the adjustments of these accounts rest, are not under control of the Secretary of War, and as there appears to be in some quarter a reluctance to bringing them to a prompt settlement, I suggest that an exact statement of what is due the Soldiers' Home in one year be called for from the pay department of the Army, which I think could furnish it.

For a number of years after the foundation of the Home it was conducted on a small scale, there being few applications for admission, and as the money passed to its credit was not all needed for current expenses, it accumulated and was invested. From the foundation thus formed the handsome domain upon which the Home is located was purchased and the buildings were erected and all the improvements made. It is a very fine property, which will not decrease in value.

Besides this, money has been invested in Government bonds and other securities, and the Home has now on deposit in the vaults of the National Safe Deposit Company of this city—

United States 4 per cent. registered bonds	\$780,000
Missouri 6 per cent. coupon bonds	40,000
Young Men's Christian Association stock	62,500
Total	\$882,500

I counted these securities and verified their presence in the vault. The stock of the Young Men's Christian Association pays no interest, and, in my judgment, might as well be regarded as worthless.

By more recent enactment (act March 3, 1883) Congress has provided that all money hereafter awarded to the Home by the accountants of the treasury, or coming from any other source, including the proceeds of existing investments when they fall due, shall be deposited in the Treasury of the United States and draw interest at the rate of 3 per cent. per annum, to be paid quarterly to the treasurer of the Home. By this arrangement there has accumulated in the treasury a sum called the permanent fund, amounting at the date of my inspection to \$520,517.76.

When the other investments above referred to fall due and are added to this, omitting the Christian Association stock, not worth counting, there will be in the treasury \$1,340,517, yielding \$40,215 interest each year.

This interest, together with the deductions from soldiers' pay and the amount of fines and forfeitures in any year, is what may be considered as the sum which the officers of the Home, are authorized to expend for current expenses in that year.

There was set apart for the Home as coming from contributions and fines—

For the year ending September 30, 1884.....	\$128,026 65
For the year ending September 30, 1885.....	122,528 91
For the year ending September 20, 1886.....	87,704 32

Showing a difference between the years 1884 and 1886 of over \$40,000, whereas the amount accruing to the Home, in the two years, coming from exactly the same sources, must have been nearly equal.

Should the Treasury officers fail to audit any of the accounts from the pay department for an entire year, there would be nothing to place to the credit of the Home, and it could be kept up only by a draft upon the permanent fund; but this draft would be replaced when the accounts were finally acted upon, for the money would in reality be in the Treasury.

At the date of the inspection by General Davis, August 31, 1885, there remained in the Treasury to the credit of the permanent fund of the Home \$466,778.86, and at the date of my inspection, September 21, 1886, the balance was \$520,517.76, showing an increase of \$53,738.90 in that interval of time.

There had been added to the credit of the fund \$205,272.29, and deducting from this, \$1,000 which came from the sale of a piece of ground, the remainder, \$204,272.29, resulted from the settlement of accounts in the Treasury made during the year.

The custom has grown up, and seemingly a very proper one, of regarding that part of the credits to the fund which has resulted from accounts originating and settled during the year as pertaining to the income for that year, and proper to be used for current expenses, while the remaining portion, coming from accounts for previous years, together with all sums forfeited by deserters, is to be added to the permanent endowment. In accordance with this rule, out of the \$205,272.29 of credits, \$87,704.32 was income, while \$117,567.97 belonged to the endowment.

Reports from the Second Auditor show that drafts to the amount of \$136,020 were made upon the permanent fund during the year, being \$48,315.68 in excess of the amount settled on account of contributions and fines for that time. This last sum was a direct draft upon the capital of the Soldiers' Home.

As has been before stated, the amount set apart as belonging to current income in the year 1886 was more than \$40,000 less than in the

year 1884. Had it been as great as in the last-named year the overdraft upon the permanent fund would have been less than \$10,000.

The fact remains, however, that the actual income of the Home, to which its expenses should be restricted, is only a matter of conjecture, and as long as this continues the difficulty of regulating and limiting expenses will exist.

The Soldiers' Home was established by act of March 3, 1851, and all who have since contributed to its support and likewise the soldiers of previous wars, including that of 1812, are entitled to be members, with all the rights annexed thereto. During the long time that has since elapsed, including the period of the civil war, when desertions were numerous, sometimes of men having considerable amounts of pay as well as bounties due them, the Home must have fallen heir to a very large amount of money, and it is believed by many that only a small part of its claims have been audited and passed to its credit. Should this be true, and were these accounts all settled up to date, the Home might have an amount to its credit in the Treasury yielding a sufficient interest to relieve it from future embarrassment.

The question most important to be immediately determined is, whether the establishment, as now conducted, is keeping within its means or is exceeding its proper income? If the latter, after a full examination, should be found to be the case, it should be stopped at once, or disaster must soon come. It is for this reason that I have recommended to the honorable Secretary to make use of the pay department of the Army for obtaining such information as its records afford.

At each session of Congress since 1883 an appropriation of \$10,000 has been made for additional clerical force to be employed in the Treasury Department for the adjustment of the long-standing back claims of the Soldiers' Home, but notwithstanding this increase of force, the work has gone on slowly, and a much greater effort will be required to bring it to an end in a reasonable time.

If radical retrenchment in the management of the Home must in the end be resorted to, the question as to where to begin will come up. Cheaper and inferior clothing and a more meager diet might be given to the inmates, and the extra-duty pay given to those who work could be taken away, while such work as is necessary for the comfort of the inmates might be required of them without pay.

These, however, would be most unpleasant measures, and before reducing its old soldiers to the condition of paupers Congress would, no doubt, appropriate money to cover any necessary deficiency.

The sale of that part of the domain now kept as a public park, and the investment of the money so as to increase the revenue of the Home, suggests itself as the first step to be taken in any enforced reduction of expenses. Even if not sold, by closing it to the public the cost of keeping its roads in repair would be avoided. It would, without doubt, sell for \$1,000,000, and this amount added to the permanent fund would increase the annual income by \$30,000.

The officers of the Home, more than any others, are interested in finding out what they can properly spend, and will do all in their power towards solving that problem.

Very respectfully, your obedient servant,

A. BAIRD,

Brigadier and Inspector General, Bvt. Maj. Gen., U. S. A.

THE SECRETARY OF WAR.



UNITED STATES MILITARY ACADEMY.

UNITED STATES ARMY





VIEW FROM WEST POINT, LOOKING NORTH, WITH SIEGE BATTERY IN FOREGROUND.

REPORT

OF THE

BOARD OF VISITORS TO UNITED STATES MILITARY ACADEMY.

To the Secretary of War, the President of the Senate, and Speaker of the House of Representatives :

In accordance with the statute, the following report of the Board of Visitors to the United States Military Academy at West Point is herewith submitted.

The appointment, duties, and compensation of the Board of Visitors are set forth in the following sections of the Revised Statutes of the United States, to wit:

SEC. 1327. There shall be appointed every year, in the following manner, a Board of Visitors to attend the annual examination of the Academy. Seven persons shall be appointed by the President, and two Senators and three members of the House of Representatives shall be designated as visitors by the Vice-President or the President *pro tempore* of the Senate and the Speaker of the House of Representatives, respectively, at the session of Congress next preceding such examination.

SEC. 1328. It shall be the duty of the Board of Visitors to inquire into the actual state of the discipline, instructions, police administration, fiscal affairs, and other concerns of the Academy. The visitors appointed by the President shall report thereon to the Secretary of War, for the information of Congress, at the commencement of the session next succeeding such examination, and the Senators and Representatives designated as visitors shall report to Congress, within twenty days after the meeting of the session next succeeding the time of their appointment, their action as such visitors, with their views and recommendations concerning the Academy.

SEC. 1329. No compensation shall be made to the members of said Board beyond the payment of their expenses for board and lodging while at the Academy, and an allowance, not exceeding eight cents a mile, for traveling, by the shortest mail-route, from their respective homes to the Academy, and thence to their homes.

Section 1, act of Congress approved March 3, 1877, being an act making appropriations for the support of the Military Academy for the fiscal year ending June 30, 1878, provided that—

The expenses allowed by section thirteen hundred and twenty-nine of the Revised Statutes shall be paid as follows: Each member of the Board of Visitors shall receive not exceeding eight cents per mile for each mile traveled, by the most direct route, from his residence to West Point and return, and shall, in addition, receive five dollars per day for expenses during each day of his service at West Point.

MEMBERS OF THE BOARD.

The members of the Board of Visitors for the year 1886 were the following:

APPOINTED BY THE PRESIDENT.

Hon. KEMP P. BATTLE, LL. D.	Chapel Hill, N. C.
Mr. WILSON S. BISSELL	Buffalo, N. Y.
General WILLIAM H. BLAIR	Belleville, Pa.
General GEORGE P. COSBY	Sacramento, Cal.
Prof. W. G. SUMNER	New Haven, Conn.
General FRANCIS T. NICHOLS	New Orleans, La.
Col. THOMAS C. MCCORVEY	Tuscaloosa, Ala.

REPORT OF THE SECRETARY OF WAR.

APPOINTED BY THE PRESIDENT OF THE SENATE.

Hon. CHARLES F. MANDERSON.....Omaha, Nebr.
 Hon. RANDALL L. GIBSON.....New Orleans, La.

APPOINTED BY THE SPEAKER OF THE HOUSE OF REPRESENTATIVES.

Hon. EDWARD S. BRAGG.....Fond du Lac, Wis.
 Hon. JAMES LAIRD.....Hastings, Nebr.
 Hon. EGBERT L. VIELE.....New York City, N. Y.

ORGANIZATION OF THE BOARD.

The Board met for organization on the 2d day of June, 1886, elected General Francis T. Nichols, of Louisiana, president, and General George P. Cosby, of California, and Col. Thomas C. McCorvey, of Alabama, secretaries.

The Board having notified the Superintendent of the Academy, General Wesley Merritt (colonel Fifth Cavalry, United States Army), of its organization, was waited upon by that officer, together with the staff officers, professors, and instructors, and the following programme of the examination submitted:

[Orders, No. 73.]

HEADQUARTERS UNITED STATES MILITARY ACADEMY,
West Point, N. Y., May 17, 1886.

I. The annual examination will begin on Tuesday, the 1st proximo, and continue daily (Sundays excepted), from 9 o'clock a. m. till 1 o'clock p. m. and from 2.30 o'clock p. m. till 4.30 o'clock p. m., till finished.

II. The Academic Board will be divided into two committees.

The first committee to be composed of—

- The professor of natural and experimental philosophy;
- The professor of drawing;
- The professor of mathematics;
- The commandant of cadets;
- The professor of civil and military engineering; and
- The instructor of ordnance and gunnery.

The second committee to be composed of—

- The professor of modern languages;
- The professor of chemistry, mineralogy, and geology;
- The professor of history, geography, and ethics;
- The professor of law; and
- The instructor of practical military engineering.

The first committee will sit in the library, and examine orally—

- (1) The first class in ordnance and gunnery.
- (2) The first class in engineering.
- (3) The third class in mathematics.
- (4) The second class in natural and experimental philosophy.
- (5) The first class in French.

And by written examination—

The fourth class in mathematics at 8 a. m. June 1, in room No. 23, academic building.

The third class in French at 8 a. m. June 2, in room No. 23, academic building.

By inspection of marks and drawings:

The second and third classes in drawing.

The second committee will sit in room No. 1, academic building, and examine orally—

- (1) The second class in chemistry, mineralogy, and geology.
- (2) The fourth class in French.
- (3) The fourth class in English.
- (4) The first class in Spanish.
- (5) The first class in law.

By written examination—

(1) The fourth class in French, 8 a. m. June 2, in "mess hall."

(2) The first class in Spanish, 2 p. m. June 4, in room No. 23, academic building.

In all, the classes of oral examination will begin with the lowest sections, and the examination will be so conducted as not to interfere with the usual hours of meals of the cadets.

The Superintendent will preside in either committee with which he may be present.

III. After the completion of the examination of the first class in Spanish, the professor of modern languages will join the first committee, with a view to conducting the oral examination of the third class in French.

IV. As each committee shall complete its labors of examinations its presiding officer will report the fact to these headquarters.

V. First Lieut. John R. Totten, Fourth Artillery, and First Lieut. Frederick Wooley, Tenth Infantry, are appointed the secretaries of the second and first committees, respectively. The record of each committee will be so kept as to show clearly the length of time occupied in examination by each department of instruction.

At the close of each day's proceedings, the secretaries will report to the adjutant of the Academy the progress of the examination and they will transmit to the secretary of the academic board the records of the proceedings of the committees as soon as they are completed.

VI. The instructors will report daily to the heads of their respective departments and keep themselves informed as to the time the services will be required.

VII. The following military exercises will take place during the examination :

Exercise.	Subject.	Date,
		1886.
Infantry	Review	June 2
	School of the battalion	June 4
	Battalion-skirmish drill	June 8
Artillery	Siege-battery drill	June 1
	Mortar-battery drill	June 1
	Light-battery drill	June 3
Cavalry	Sea-coast-battery drill	June 5
	School-of-the-company drill	June 7
	School-of-the-battalion drill	June 7
	School-of-the-soldier mounted drill	June 7
Practical	Ponton-bridge building	June 9
Military	Spar-bridge building	June 11
Engineering	Military signaling	June 11
Ordnance	Practice with ballistic machines	June 11
Small-arms	Use of the sword and bayonet	June 11
	Military gymnastics	June 11

This "order of exercises" may be changed on account of the weather, or for other causes.

VIII. The members of the first class will be graduated June 12, 1886.

PROGRAMME.

The graduating class will proceed to the designated place, escorted by the Corps of Cadets, under the command of the commandant of cadets.

Prayer.

Music—United States Military Academy Band.

Address to graduating class.

Music—United States Military Academy Band.

Address of president (or member) of Board of Visitors.

Music—United States Military Academy Band.

Delivery of diplomas.

Music—United States Military Academy Band.

Benediction.

COMMITTEES OF THE BOARD.

In order to facilitate the labors of the Board and accomplish in the most practical manner the object of their appointment, it was decided to divide the duties by the appointment of four separate committees, each having in charge a special subject of investigation, as follows:

- (1) A committee on discipline and instruction.
- (2) A committee on police administration and fiscal affairs.
- (3) A committee on ordnance and armament.
- (4) A committee on buildings, grounds, and other matters not provided for in the other committees.

The said committees to be named by the president of the Board. Accordingly, the following gentlemen were named as constituting said committees:

(1) *Committee on discipline and instruction.*—Hon. Egbert L. Viele, Col. Thomas C. McCorvey, and Prof. W. G. Sumner.

(2) *Committee on police administration and fiscal affairs.*—Hon. Edward S. Bragg, Charles F. Manderson, and Kemp P. Battle.

(3) *Committee on ordnance and armament.*—Hons. James Laird, Randall L. Gibson, and General William H. Blair.

(4) *Committee on buildings, grounds, and other matters not provided for in other committees.*—Hons. Charles F. Manderson, Wilson S. Bissel, and General George P. Cosby.

The various committees proceeded at once to the discharge of their respective duties, attending the examination of the different classes, inspecting the buildings devoted to the use of the institution, witnessing the drills and evolutions in the several arms of the service, infantry, cavalry, and artillery, and the practical exercises in engineering.

At the invitation of the Superintendent, some of the members took part in the examinations by asking questions during the recitations.

Believing that a more practical result would be attained by submitting a joint report of the result of their labors than by two distinct reports (as called for by the statute), the Board decided to act as an "homogeneous body"—all the members contributing through their several committees their individual share of observations on the condition of the institution and their views upon its management—the whole to be embodied in one report to the Secretary of War and to Congress, and the Hon. Egbert L. Viele was requested to prepare this report.

REPORT.

The object and purposes of the establishment of the United States Military Academy are too well known to require reference at this time. Its conception originated in the wise and thoughtful mind of George Washington, and it has been fostered with almost religious care from its foundation to the present time. The fortunate selection of the historic spot it occupies for its location has largely influenced its success, since no spot so isolated and yet so accessible could possibly be found possessing at the same time the advantages of a close connection with the "outside world."

It is, by virtue of its topographical position, so entirely removed from the realms of commerce and trade and of population that no extraneous influence can be brought to bear to disturb its quiet seclusion as a place of study or mar the effect of its enforced discipline.

In pursuing its investigations the Board, having in view the practical value of the institution to the country and its economical administration, deemed it necessary to ascertain—

1. If the discipline exercised on the cadets is in accordance with justice and humanity, and if its effects upon the individual results in developing and maintaining a high tone of morality and manhood.

2. If the course of instruction is in keeping with the advancement of knowledge, and especially if the improvements occurring all over the world in the art and science of war are recognized and taught.

3. Whether the system adopted for the conduct of the fiscal affairs of the institution is calculated to secure the best results through a judicious and economical expenditure of the moneys appropriated for that purpose.



CADET BARRACKS,



METHODS OF APPOINTMENT OF CADETS AND THE RESULTS.

There are allowed by law, through the nomination of members of Congress, one cadet for each Congressional district and ten appointments by the President, making the legal number at present 344 cadets. There are now at the Academy only 269 cadets, arranged in classes as follows:

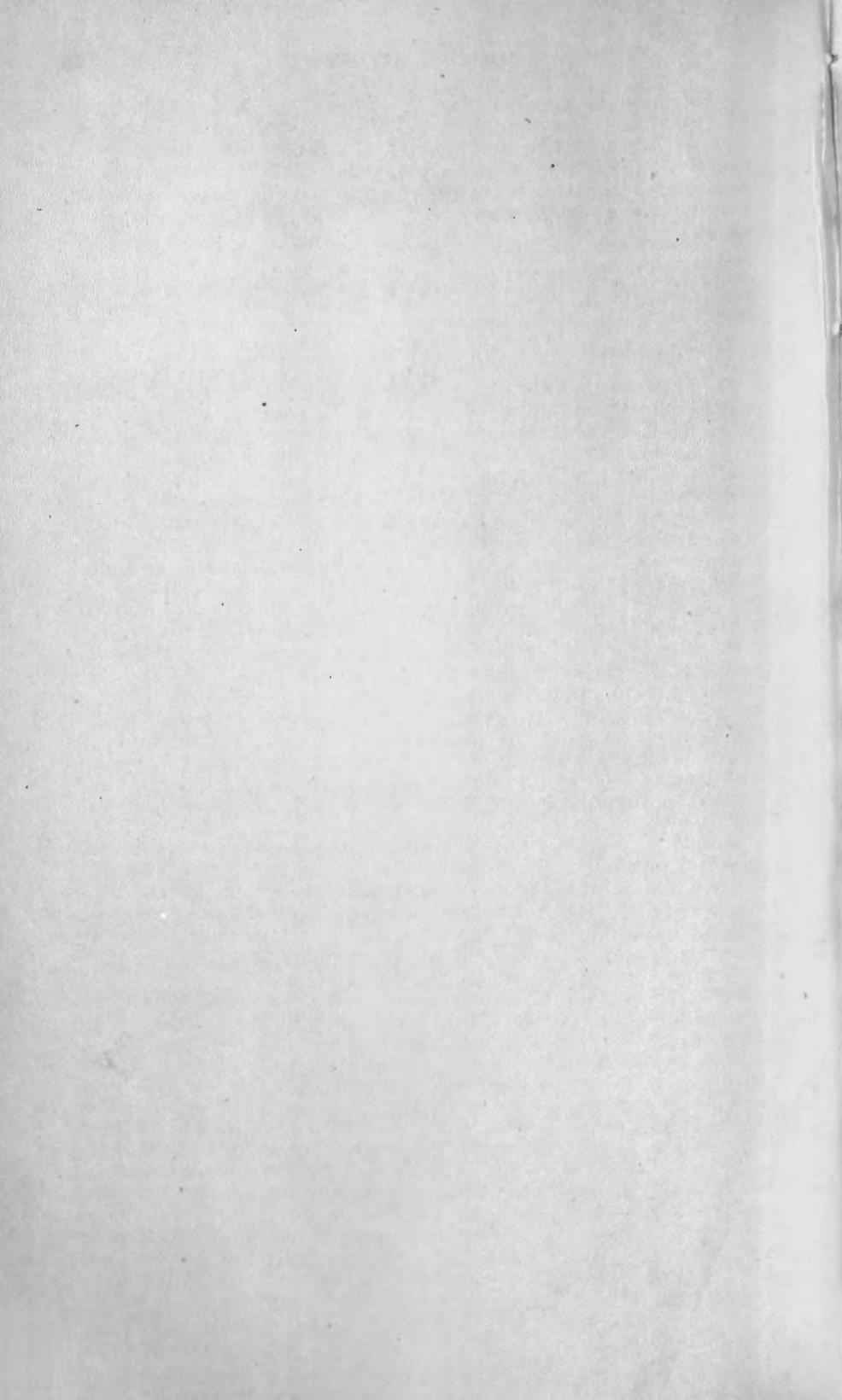
First class	77
Second class	67
Third class	51
Fourth class	74
Total	269

This shows a deficiency in the maximum number allowed of 75 cadets; that is to say, there are 75 vacancies in the corps as now organized. When the present first class graduates, on the 12th instant, there will be 77 more vacancies, making 152 in all. To fill these vacancies 136 candidates for admission have been named, which will still leave 16 vacancies, even should all of those who present themselves for admission pass both the physical and mental preliminary examinations, while experience has shown that at least 24 per cent. fail. To supply the possible failure of some of these, 31 alternates have been appointed to be examined in case the principal appointee in the particular district from which they are appointed should fail. These alternates will have the effect to reduce the percentage of failure in the preliminary examination, but there will, in all probability, remain from 34 to 40 vacancies in this class when it begins the academic year. Adding to this about 50 per cent. who fall out of every class between the time of entering and graduating, there would be left a large and increasing diminution in the strength of the corps during each year. It was probably in view of this fact, among others, that Congress, by a law since repealed, authorized the President to appoint ten cadets "at large" each year. This authority is now limited to ten appointments of this character in four years.

Recognizing the fact that the pay of an individual cadet is small compared with the total expenses of the Academy, the Board consider that it would be an act of sound public policy to give to the President the authority to appoint ten cadets each year, not only as a means of maintaining the strength of the corps, but also of providing for many deserving young men who can in no other way secure admittance to the Academy.

It was probably intended by conferring this power upon the President to afford an opportunity for the appointment of sons of officers of the Army, who, by reason of their duties, had no permanent residence in any Congressional district, and by a natural sequence the sons of those who served in the last war as "volunteers" have had their claims recognized in the number appointed by the President. The applicants for these appointments are very numerous, and the solicitations very pressing. If this number should be still further increased, by authorizing each United States Senator to name a cadet, it is believed that there would be still (through incidental circumstances) an average number of cadets less than the total number allowed by law.

The great value to the "country at large" of the technical education acquired at West Point, unlike in its theory and practice to that of any other institution, cannot be overestimated.



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The great value to the "country at large" of the technical education acquired at West Point, unlike in its theory and practice to that of any other institution, cannot be overestimated.

So impressed was General Grant, after his very extraordinary experience as the head of the great Armies of the Republic with the value of the United States Military Academy to the nation, that he asserted as his firm conviction, as a matter of public policy, that the number of cadets should be increased to one thousand, from which an annual selection should be made of those required for military service, while the remainder of those graduating each year and not required for public service would, by being disseminated throughout the country, add to the ranks of the people men of scientific attainments for the arts in peace and "ready-soldiers" in the event of war.

The fact that the average number of vacancies in the Army list exceeds the number of graduates is an additional reason why the range of appointments should be extended.

Below will be found a table prepared by Lieutenant Simpson, showing the number of casualties making, directly or indirectly, vacancies in the Army which graduates of the Military Academy may be assigned to fill, and the number of such graduates for the last fourteen years. The table does not cover a longer period, because, in 1871 there was a considerable reduction in the number of regiments in the Army, and its strength since has been nearly uniform.

The number of casualties, taken from the official Army Registers, has been obtained as follows:

First. By counting the actual number of casualties in the Corps of Engineers and Line of the Army, and in those Staff Departments (Adjutant-General's, Inspector-General's, and Ordnance) in which vacancies are filled by appointment from the line; and excluding the Signal Corps, and the Medical, Quartermaster, Subsistence, and Pay Departments, as vacancies in these either cannot or need not be filled by appointment from the line. In cases where vacancies in the latter have been filled from the line, such vacancies have been counted.

Second. By counting the casualties on the retired list. As there are always more subjects for retirement than places for them on the list every vacancy on this list is soon filled by taking an officer from the active list. The retired list is open to the whole Army. The number of officers, vacancies among whom would cause vacancies among the second lieutenants of the Line or Corps of Engineers, is 1,830. The number of vacancies where this would not be the case is 380. The proportion is, therefore, about 4.8 to 1. Supposing that retirement is equal in the different branches of the service, 48 officers of the former class go upon the retired list to 10 of the latter, and therefore $\frac{48}{10}$ of the casualties on the retired list give rise to vacancies open to graduates, non-commissioned officers, and appointees from civil life.

The number of each graduating class is taken from the official Military Academy Register of the corresponding year.

1.	2.	3.	4.	5.	6.
Year.	Number of graduates corresponding to year.	Casualties causing vacancies available for graduates, of the Military Academy.	Total number of casualties on the retired list.	Forty-eight fifty-eighths of preceding column.	Sums of columns 3 and 5 giving total number of casualties providing vacancies for graduates.
1872.....	57	60	13	11	71
1873.....	41	69	9	7	76
1874.....	41	78	9	7	86
1875.....	43	47	9	8	55
1876.....	48	57	13	11	68
1877.....	76	64	10	8	72
1878.....	43	53	6	5	58
1879.....	66	25	5	4	29
1880.....	52	37	9	7	44
1881.....	53	44	12	10	54
1882.....	37	51	12	10	61
1883.....	52	47	23	20	67
1884.....	37	44	13	10	54
1885.....	39	37	21	18	55
Total.....	685	714	164	136	850
Yearly average.....	*49				*61

* Nearly.

Comparing columns 2 and 6, we see that the average number of vacancies annually exceeds by about 12 the average number of graduates, and that an unusually large class merely helps supply deficiencies of other years.

DISCIPLINE OF CADETS.

The system of discipline carried out at the Academy is based primarily upon the Articles of War, supplemented by the Regulations for the Government of the Army of the United States and by the General Regulations for the United States Military Academy.

The General of the Army has supervision and charge of the Academy.

The Superintendent of the Academy, and in his absence the next in rank, has the immediate government and command of the Academy.

The professors and other heads of departments of instruction, and the officers in those departments, constitute the academic staff.

The commandant of cadets, and in his absence the next in rank in the tactical department, has immediate command of the battalion of cadets.

The cadet battalion is composed of four companies, each containing a portion of each of the four classes. An officer of the Army, detailed as assistant instructor of tactics, is assigned to duty with each company, and has the direct supervision of it. Each company is officered by a captain and three lieutenants taken from the first or graduating class of cadets, a first sergeant and four line sergeants taken from the second class, and five corporals taken from the third class. Each and all of the officers named are expected and required to be at all times on the alert, when the cadets are on duty, to take notice of and promptly report any and every deviation from the rules and regulations prescribed for the gen-

eral conduct of the cadet, and, if on drill or parade, any neglect to conform in every particular with the precise letter of the tactics. These reports are made to the commandant of cadets and by him submitted to the Superintendent, being also made public at parade by the adjutant or posted at the guard-room. Each cadet has an opportunity to make either a verbal or written excuse for the delinquency he may be reported for. If he makes no excuse it stands against him in the form of demerit marks; in addition to which he may receive additional punishment in form of confinement to his quarters, extra hours of guard duty, or the deprivation of certain privileges allowed to cadets in good standing. Should the offense be of a grave character he may be court-martialed and dismissed or receive some mitigated punishment. There are eight classes of offenses. The offenses in each class are specified in detail, and the number of demerit marks for each offense enumerated. Of the offenses of the first class receiving for each offense ten demerit marks there are enumerated twelve; of the second class receiving seven demerit marks, forty offenses are enumerated; of the third class receiving five demerit marks, seventy-six offenses are enumerated; of the fourth class receiving four demerit marks, one hundred and three offenses are enumerated; of the fifth class receiving three demerit marks, eighty-two offenses are enumerated; of the sixth class receiving two demerit marks each, seventy-five offenses are enumerated; of the seventh class receiving one demerit mark each, forty-three offenses are enumerated; of the eighth class or academic delinquencies there are forty-three offenses receiving from one to four demerit marks each. This makes a total of four hundred and eighty-four offenses, covering the whole range of carelessness, negligence, thoughtlessness, intentional and unintentional acts which a cadet may commit, and which all of the cadet officers of every grade, as well as all the Army officers or professors connected with the institution, are required to report promptly if observed by any of them.

If any cadet shall have a total number of demerits thus recorded, exceeding 125 for the time between June 1 and December 31, both dates inclusive, or exceeding 90 for the time between January 1 and May 31, both dates inclusive (no credits being allowed other than those belonging to the time considered), he shall be reported to the Academic Board by the Superintendent deficient in discipline, and the Board shall consider and act upon such a deficiency.

At the end of every month for which the number of demerit recorded against any cadet is less than 8, the difference between 8 and that number shall be deducted from his then existing record of demerit.

Cadets of the three upper classes who have no demerit standing against them for the period commencing June 1 and ending December 20, the proportional credit due in the latter month being considered, are usually allowed a Christmas leave of absence of three days.

Cadets who may receive leaves of absence under the provisions of Paragraph 81, General Regulations, who shall have 350 demerit for the two preceding years shall be detained ten days from the beginning of the encampment; those having 325 and under 350, eight days; those having 300 and under 325, six days; those having 275 and under 300, five days; those having 250 and under 275, three days; those having 200 and under 250, two days.

The greater portion of the demerit marks is due to minor and unintentional acts, which the cadet learns to avoid as he progresses in his term at the Academy. This is illustrated by the roll of the class graduating the preceding year, in which it is shown that more than half of

the class had less than five demerit marks each, and nearly half the class had no demerit at all.

It is evident from the foregoing that the system of discipline is a very rigid one. Its Spartan severity has been open to criticism. It must be borne in mind, however, that the training at this national institution is in every sense a peculiar one, requiring peculiar methods. In the first place, the course of studies is of such a character as to require the closest and most uninterrupted attention, not only on account of the abstruse nature of the studies, but the absolute necessity there is for covering so much ground in such a comparatively short period of time. If habits of thoughtfulness and strict attention to even the slightest duty is not insisted upon with severity the mind loses its power to grasp the intricate problems placed before it. The work required cannot be accomplished except by incessant devotion to it. At the same time these young men, in addition to this scientific instruction, are being educated in a thorough knowledge of military law, the first requirement of which is absolute and implicit obedience. "He who would learn to command must first learn to obey" is an axiom in the military profession. What would be utterly disregarded in a civil institution may be a grave offense in a military school. Discipline that entails neither mental nor physical suffering cannot be too severe for a soldier, but under no circumstances should it be accompanied by the exhibition of personal animus. Nothing could be more reprehensible on the part of a superior officer. Nor should trivial offenses be magnified at the risk of making discipline ridiculous.

On the whole the impression given to the Board by the general conduct and bearing of the cadets is that of a thoroughly disciplined body of young men under perfect control, respecting themselves and one another, as well as the officers placed over them. They exhibit a modest demeanor and a manly tone, attending to their duties with promptness and alacrity. All bear every mark of a healthy and vigorous mental and physical activity. Those who have been familiar with the institution in the past express the belief that the moral element is in advance of what it was in former years.

The Board feels that it is due to General Merritt and the tactical officers under him that they should express their unreserved approbation of the manner in which they have fulfilled the responsible task assigned to them.

INSTRUCTION OF THE CADETS.

There are three elements that enter into the consideration of the matter of instruction. These are (1) the subjects taught; (2) the text-books used; (3) the methods pursued.

In discussing the subjects taught we are met at the threshold with the fact that this is a purely technical school established and maintained by the Government for the sole purpose of instructing a certain number of young men free of charge in the art and science of war in order to fit them for military service. All considerations outside of this main idea are foreign to the question, and the Board has therefore only to determine whether the system adopted leads up in the most direct and practical manner to the result desired. In the first place it is clearly manifest that mathematics constitutes the groundwork and is the principal element of the entire four years' course. There are obvious reasons why this should be the case. Mathematics forms the basis of the exact sciences, and while the mere study of mathematics independent of their application is in itself a mental discipline

regarded by a large number of educators as the best calculated to strengthen and develop the mental faculties, they contain at the same time those elements of fact and deduction upon which the higher branches of scientific study depend for their elucidation. In the art of war science is supreme. Exact science has brought it with the aid of invention to its present wonderful condition of development. The genius of man has reached to its supremest heights in the construction and use of the appliances of modern warfare. The barbaric methods by which the great captains of history and conquerors of the world attained their renown are now as impotent and obsolete as the bows and arrows of the Parthians or the war clubs of the Sandwich Islander. Pure and unadulterated science founded on mathematical exactness has replaced all other methods, and out of scientific thought and scientific experiments have been evolved those titanic guns and terrible explosives with which the nations of the earth now confront each other, and yet such is the intense activity of invention displayed throughout the world that a single year or a single month may exhibit an entirely new phase of the whole subject and develop new methods of attack or defense hitherto unthought of.

The system of instruction and the course of studies is in charge of eight professors, whose positions at the Academy are permanent (with the exception of that of the department of law), eight assistant professors, who are officers of the Army, and liable to a change of detail generally every four years, thirty-eight instructors and assistant instructors, who also are officers of the Army, and liable to change of detail every four years. In order to exhibit the nature of the duties to which these several professors, assistant professors, and instructors are assigned, their names and duties are given below:

Department.	Name.	Nature of duties.
Natural and experimental philosophy.	Peter S. Michie.....	Professor.
	First Lieut. Arthur Murray, First Artillery.	Assistant professor.
	First Lieut. William B. Gordon, Ordnance Department.	Instructor.
	First Lieut. E. Stuart, Ordnance Department.	Do.
	First Lieut. Wallace Mott, Eighth Infantry.	In charge of observatory and astronomical observations.
Modern languages.....	George L. Andrews.....	Professor.
	First Lieut. Alex. Rodgers, Fourth Cavalry.	Assistant professor of the Spanish language.
	First Lieut. Eugene A. Ellis, Eighth Cavalry.	Assistant professor of the French language.
	First Lieut. William A. Simpson, Second Artillery.	Instructor.
	First Lieut. John R. Totten, Fourth Artillery.	Do.
	Second Lieut. Carver Howland, Fourth Infantry.	Do.
	Second Lieut. J. F. Reynolds Landis, First Cavalry.	Do.
	Second Lieut. Frederick S. Folta, First Cavalry.	Do.
Drawing.....	Charles W. Larned.....	Professor.
	First Lieut. Henry A. Reed, Second Artillery.	Assistant professor.
	First Lieut. William D. Beach, Third Cavalry.	Instructor.
	Second Lieut. Clarence P. Townsley, Fourth Artillery.	Do.
Mathematics.....	Edgar W. Bass.....	Professor.
	First Lieut. Wright P. Edgerton, Second Artillery.	Assistant professor.
	First Lieut. George L. Anderson, Fourth Artillery.	Instructor.
	First Lieut. George H. G. Gale, Fourth Cavalry.	Do.

Department.	Name.	Nature of duties.
Mathematics.....	First Lieut. Frederick Wooley, Tenth Infantry.	Instructor.
	Second Lieut. Edmund D. Smith, Nineteenth Infantry.	Do.
	Second Lieut. William W. Gibson, Third Artillery.	Do.
	Second Lieut. Walter S. Alexander, Fourth Artillery.	Do.
Chemistry, mineralogy, and geology.	Samuel E. Tillman.....	Professor.
	First Lieut. Walter S. Wyatt, Ninth Infantry.	Assistant professor.
	First Lieut. Thomas C. Patterson, First Artillery.	Instructor.
	Second Lieut. Frank S. Harlow, First Artillery.	Do.
	Second Lieut. John L. Chamberlain, First Artillery.	Do.
History, geography, and ethics.	William H. Postlethwaite, chaplain....	Professor.
	First Lieut. Geo. B. Davis, Fifth Cavalry.	Assistant professor.
	Second Lieut. William P. Evans, Nineteenth Infantry.	Instructor.
Tactics	Lieut. Col. Henry C. Hasbrouck, captain Fourth Artillery.	Commandant of Cadets and instructor of tactics.
	Capt. Jacob A. Augur, Fifth Cavalry...	Senior assistant instructor of cavalry tactics.
	First Lieut. William B. Homer, Fifth Artillery.	Senior assistant instructor of artillery tactics.
	First Lieut. Henry Kirby, Tenth Infantry.	Assistant instructor of tactics, commanding company of cadets.
	First Lieut. David Price, First Artillery.	Do.
	First Lieut. Oscar J. Brown, First Cavalry.	Do.
	Second Lieut. Francis J. A. Darr, Twelfth Infantry.	Do.
	First Lieut. William D. Beach, Third Cavalry.	Assistant instructor of tactics.
	Second Lieut. John L. Chamberlain, First Artillery.	Do.
Law	Herbert P. Curtis, major and judge-advocate, U. S. A.	Professor.
	First Lieut. George B. Davis, Fifth Cavalry.	Instructor.
	Second Lieut. William B. Evans, Nineteenth Infantry.	Do.
Civil and military engineering.	James Mercur.....	Professor.
	First Lieut. Walter L. Fisk, Corps of Engineers.	Assistant professor.
	First Lieut. Gustav J. Fiebeger, Corps of Engineers.	Instructor.
	First Lieut. George W. Goethals, Corps of Engineers.	Do.
	First Lieut. James G. Warren, Corps of Engineers.	Do.
Ordnance and gunnery	Maj. Clifton Comly, Ordnance Department.	Do.
	First Lieut. Lawrence L. Bruff, Ordnance Department.	Assistant instructor.
	Second Lieut. William W. Gibson, Third Artillery.	On temporary duty.
Practical military engineering.	Capt. Philip M. Price, Corps of Engineers.	Instructor.
	First Lieut. James G. Warren, Corps of Engineers.	Assistant instructor.
	Herman J. Koehler	Master of the sword.

The following is the course of study and the text-books used at the Military Academy:

FIRST YEAR.—FOURTH CLASS.

[Books marked thus x are for reference.]

Department.	Course of study, text-books, and books of reference.
Mathematics	Davies' Elements of Algebra; Davies' Legendre's Geometry; Church's Plane and Spherical Trigonometry; Davies' Surveying; Church's Analytical Geometry.
Modern languages...	Keetel's Analytical and Practical French Grammar; Keetel's Analytical French Reader; x Spiers' and Surenné's Dictionary; Whitney's Essentials of English Grammar; Hart's Manual of Rhetoric and Composition; Abbott and Seeley's English Lessons for English People; Abbott's How to Write Clearly; x Webster's Dictionary.
History, Geography, and Ethics.	Lectures in Ethics and in Universal History.
Tactics of Artillery and Infantry.	Practical Instruction in the Schools of the Soldier, Company, and Battalion; Practical Instructions in Artillery.
Use of small-arms....	Instructions in Fencing and Bayonet Exercises and Military Gymnastics.

SECOND YEAR.—THIRD CLASS.

Mathematics	Church's Analytical Geometry; Church's Descriptive Geometry, with its Application to Spherical Projections; Church's Calculus; Church's Shades, Shadows, and Perspective; Chauvenet's Treatise on the Method of Least Squares.
Modern Languages..	Keetel's Analytical and Practical French Grammar; Borel's Grammaire Française; Bocher's College Series of French Plays; Roemer's Cours de Lecture et de Traduction, Vols. I and II; Spiers' and Surenné's Dictionary.
Drawing	Topography and plotting of surveys with lead-pencil, pen and ink, and colors; construction of the various problems in descriptive geometry; shades and shadows, and Linear Perspective and Isometric Projections; Practical Surveying in the field.
Tactics of Artillery, Infantry, and Cavalry.	Practical Instruction in the Schools of the Soldier, Company, and Battalion; Practical Instruction in Artillery and Cavalry.

THIRD YEAR.—SECOND CLASS.

Natural and Experimental Philosophy, Chemistry, Mineralogy, and Geology.	Bartlett's Mechanics; Bartlett's Astronomy; Michie's Elements of Wave-motion relating to Sound and Light. Bloxam's Chemistry, fifth edition; Everett's Deschanel's Heat, Part II; Tillman's Principles of Chemical Philosophy; Thompson's Elementary Lessons in Electricity and Magnetism; Dana's Mineralogy; Le Conte's Elements of Geology.
Drawing	Free-hand drawing and landscape in black and white; constructive and architectural drawing in ink and colors.
Tactics of artillery, infantry, and cavalry.	United States Army Artillery Tactics; Tidball's Manual of Heavy Artillery Service, United States Army; United States Army Cavalry Tactics; Upton's United States Army Infantry Tactics; Practical Instruction in the Schools of the Soldier, Company, and Battalion; Practical Instruction in Artillery and Cavalry.
Practical military engineering.	Myer's Manual of Signals; Practical and Theoretical Instruction in Military Signaling.

FOURTH YEAR.—FIRST CLASS.

Civil and military engineering and science of war.	Wheeler's Civil Engineering; Wheeler's Field Fortifications; Wheeler's Military Engineering (Permanent Fortifications, Siege Operations, and Military Mining); Wheeler's Elements of the Art and Science of War; Mahan's Stereotomy.
Modern languages...	Knapp's Spanish Grammar; Knapp's Spanish Readings; Seane's Newman and Baretti's Dictionary.
Law	Woolsey's International Law; Cooley's General Principles of Constitutional Law in the United States; General Orders No. 100, A. G. O., 1863; Ives's Treatise on Military Law.
History, geography, and ethics.	Swinton's Outlines of the World's History; Labberton's Historical Atlas.
Practical military engineering.	Practical Instruction in the Construction of Ponton and Spar Bridges, in the Preparation of Siege Materials, and in Laying Out Field and Siege Works; Practical Instruction in Astronomy, in Surveying, in Military Reconnaissances, in Field Telegraphy, and Night Signaling; Ernst's Manual of Practical Military Engineering; Myer's Manual of Signals.
Tactics of artillery, infantry, and cavalry.	Practical Instruction in the Schools of the Soldier, Company, and Battalion; Practical Instruction in Artillery and Cavalry.
Ordnance and gunnery.	Benton's Ordnance and Gunnery; Ordnance Pamphlets (Mordecai) Nos. 1, 2, 3, 4, and 5; Practical Pyrotechnics; Practical Ballistics.

The questions as to what text-books should be used in the instruction of the several classes is one of very great importance. These are decided upon by the Academic Board, and it may be asked, under the circumstances, if they alone are the best judges. The professors are greatly embarrassed in this particular by the desire on the part of each of them to make his own particular branch as thorough and complete as possible, and each endeavors to secure the most time for his special course. Nothing is more palpable than the fact that four years is not sufficient to impart all that the cadet ought to know. The exact sciences are not only the result of the accumulated thought and study of all the ages, but the present age is ripe with new and ever-increasing problems, all valuable, and a knowledge of them is for the most part a necessity to a scientific course. Just how to condense this information into a limited period of study, just where to leave off, are difficult questions to decide.

All this was made clearly apparent to the Board of Visitors at every step of their investigation. They would gladly, in this report, aid the Government with their suggestions in this most difficult problem, if it were possible to do so. A single glance at the range of studies which forms the curriculum of the Academy is sufficient to show the embarrassment in the way. There is one fact, however, no less apparent to the Academic Board than to the Board of Visitors, and that is the necessity for remodeling the course in practical engineering. The text-books in use are not up to the knowledge of the day, nor do they grasp the subject-matter with the force that is required.

The cadet enters the first class, at the end of the third year, with his mind trained by three years of close study of abstract mathematics, and the last year's course should open to him a field for thought and observation outside of technical details. To this end it is believed that more time should be devoted by the professor to oral instruction and the stimulation of thought—the calling out, as it were, from the cadet of his latent faculties by free discussion outside of the text-book. In fact, if one day in each week (say Saturday) were devoted by each instructor in the section-room, in all the classes, to going over in advance the lessons of the week to come, the cadets would be materially aided in their efforts to grasp the problems before them. This course was pursued by one instructor some years ago, with such success that his section has not ceased to cherish the remembrances of his services to them to this day. The Board deems this matter worthy of careful consideration.

As the time of the professor of engineering is necessarily closely occupied with his duties during the whole academic term, it is suggested that an officer of engineers, experienced in field operations and especially qualified by thought and study for such duty, be detailed for duty at the Academy, to aid the professor of engineering in revising the course. It is believed that this would be the most expeditious and practical way of accomplishing what is imperatively needed—a better knowledge of the advanced condition of the art of war. And this should be done periodically, for the reason that text-books on this subject, having necessarily a limited circulation, are rare books, published only at long intervals, and are seldom in accord with the times in the information they contain.

Another feature of the present method of instruction seems to call for some remark. With the exception of the regular professors, eight in number, the whole corps of teachers, nearly fifty in all, are on temporary duty at the Academy, subject to constant change of detail.

They are all officers belonging to the different arms of the service, ordered to duty at the Academy, sometimes by selection, sometimes at their personal request, and sometimes against their wishes. Most of them have been proficient while cadets in the several branches to which they are detailed as instructors. Their capacity for instruction, however, has had no opportunity for development, and consequently their being detailed for this duty is purely experimental. The question that naturally presents itself is this: Is not this experimental detail somewhat detrimental to those who are to be instructed? In other words, is there a sufficient element of instruction in this method?

A capacity for teaching does not always accompany the possessor of knowledge. The faculty for imparting information is a rare attribute of an intelligent mind. Simply to superintend in a perfunctory manner the monotonous study of the problems and formulas of a dry course of mathematics may aid the training and discipline of the mind, but it does not necessarily serve to quicken the intellect or stimulate original thought and reasoning.

It has at times happened that some officers have had enough occupation for their minds in the review of the course as presented for daily recitation, allowing them no time or inclination to go beyond that. What suggests itself to the Board, therefore, is this: Is sufficient care taken to secure special aptitude for teaching in this constant detailing and changing of nearly fifty instructors for the cadets? And when this special aptitude for teaching may be discovered, does it prevent the transfer of the officer to other duty, simply as a question of detail and nothing else? Are there not elements of error and possible injustice both to cadets and instructors in the present methods pursued?

Still another question presents itself to the Board in relation to the ethical course: Has experience shown that the text-books in this course are the best calculated to give to the minds of the cadets that polish which cannot be extracted from pure mathematics? Is there not lacking, at the end of the course, that habit of clear enunciation and that power of constructing the English language so essential to a finished education?

On the contrary, is there not developed, from one cause or another, a habit of hesitation in speech, a useless repetition of words, and a want of confidence in the methods and manner of stating conclusions to which the mind has arrived? Would not reading aloud selections from standard authors as a part of the daily recitations have a tendency to check this habit?

It is very possible that a certain feeling of nervousness and anxiety attending the ordeal of a rigid examination may have produced erroneous impressions on the minds of some of the members of the Board, who have felt it incumbent upon them to refer to this subject.

Looking at the whole subject of instruction from the standpoint of the examinations, the Board does not hesitate to express the opinion that these examinations evidence the diligence and conscientious zeal of the professors and instructors, and they show that the cadets as a rule have an earnest desire to acquire in a thorough manner all the knowledge of their future profession that they possibly can, and to acquit themselves with honor and credit towards their *alma mater* and the Government that is educating them.

FIELD EXERCISES AND MANEUVERS.

The Board was extremely fortunate in being favored with fine weather during the whole period of their stay at the Academy. This permitted the carrying out of the entire programme of the out-of-door exercises without interruption. The infantry, artillery, and cavalry drills embraced all the evolutions of those several arms of the service, and were executed in a faultless manner. Those of the cavalry and artillery especially, were conducted with so much dash and spirit, that at times it seemed as if some accident must happen, but nothing whatever occurred to mar the perfection displayed at each drill. A new field battery is, however, required.

The horsemanship exhibited by the cadets in the riding-hall was excellent, and an equal proficiency was shown in the gymnastic exercises.

The practice with the sea-coast battery was accompanied by great skill and precision in the handling of heavy guns, although neither the guns nor the methods were in accordance with modern improvements.

The rapid and orderly manner in which the pontoon bridge was constructed, and the ease and readiness with which the arduous duties of this drill were performed, is worthy of praise.

In fact, the Board would find great difficulty in suggesting terms of criticism in connection with any of the field exercises. It is somewhat remarkable that, with so much mental work to accomplish, the time could be found to arrive at such a degree of excellence in this branch of instruction.

It is evident, however, that this physical exercise, arduous and incessant as it is, must necessarily be an important factor in the education of the cadet, as a simple counterpoise to the mental strain which the pressure of studies involves. It would be a very difficult matter indeed for the mind to stand this pressure without the accompaniment of the drills and maneuvers.

CADET ENCAMPMENT.

In connection with field exercises should be mentioned the encampment of the cadets during the summer months. Immediately on the close of the examination each year the cadets go into camp and remain there until the last of August, thus giving two and a half months to this very essential part of the education.

A member of the Board visited and inspected the camp with the view of including the result of such inspection in this report.

The camp ground is on the easterly side of the plain adjoining the site of old Fort Clinton, and overlooking the Hudson. It is laid out in accordance with the methods prescribed in the Regulations for the United States Army, and is arranged for the four companies constituting the cadet battalion.

In all the appointments of the camp nothing is omitted that is essential to a complete knowledge of this important element of military education. The camp is the habitat of the soldier in time of war. On its proper location and sanitary care depend his health and comfort, and on its thorough discipline depends the character, and often the safety, of the Army.

At the Military Academy it is the camp life that gives to the cadet that knowledge of military duties that renders this portion of his education as familiar as the alphabet to the language. These duties and methods, this discipline and instruction, he never forgets. They form a

part of his nature, and when the necessity comes for him to make a practical use of the information thus acquired, he is never at a loss as to what course to pursue.

The drills in the several arms of the service during the encampment are continuous, test the endurance of the cadet to the utmost, and develop his physical condition in a manner such as nothing else could accomplish. His life during this period is in all respects that of a common soldier, and none of the duties of the soldier, no matter how trivial, are omitted. The commandant of cadets, and the four tactical instructors, occupy tents during the encampment, the same as the cadets, and the most assiduous efforts are made to make this portion of the course in every way complete.

PUBLIC BUILDINGS AND GROUNDS.

The land owned by the United States and reserved for public use at West Point consists of 2,200 acres, a comparatively small portion of which is occupied by the institution proper.

For the most part it is a wild, rugged tract, covered with forest trees, situated in the Highlands of the Hudson, where the river makes an abrupt bend, forming the projecting point from which the name of "West Point" is derived. The background is: high mountain land, rising precipitately from the plain, which is a part of the ancient terrace of the river, and possesses a remarkable geological interest. The drift of the diluvial period has deposited in the gravel and boulder beds that form the upper stratum of the plain specimens of all the rocks and many of their mineral and fossil remains that are found in place for a distance of 250 miles to the north, and as those rocks embrace the whole series of the successive formations that constitute the earth's crust from the archæan to the latest quaternary, these deposits may be looked upon as so many pages of the great book of nature illustrating the history of the created world, transported by glacial action and mighty floods to this spot, selected for a national school of instruction. This plain or ancient terrace is what constitutes the local of the Military Academy.

At the sharp bend in the river, with two sides commanding the stream on the north and east, stands Fort Clinton, the old field work, restored and preserved, that was thrown up originally by the patriots of '76. On the heights beyond are the ruins of old Fort Putnam, its crumbling casemates marking the ravages of time, and telling of the century that has gone by since sturdy heroes built here their citadel of defense, so nearly lost by treason's dastard act.

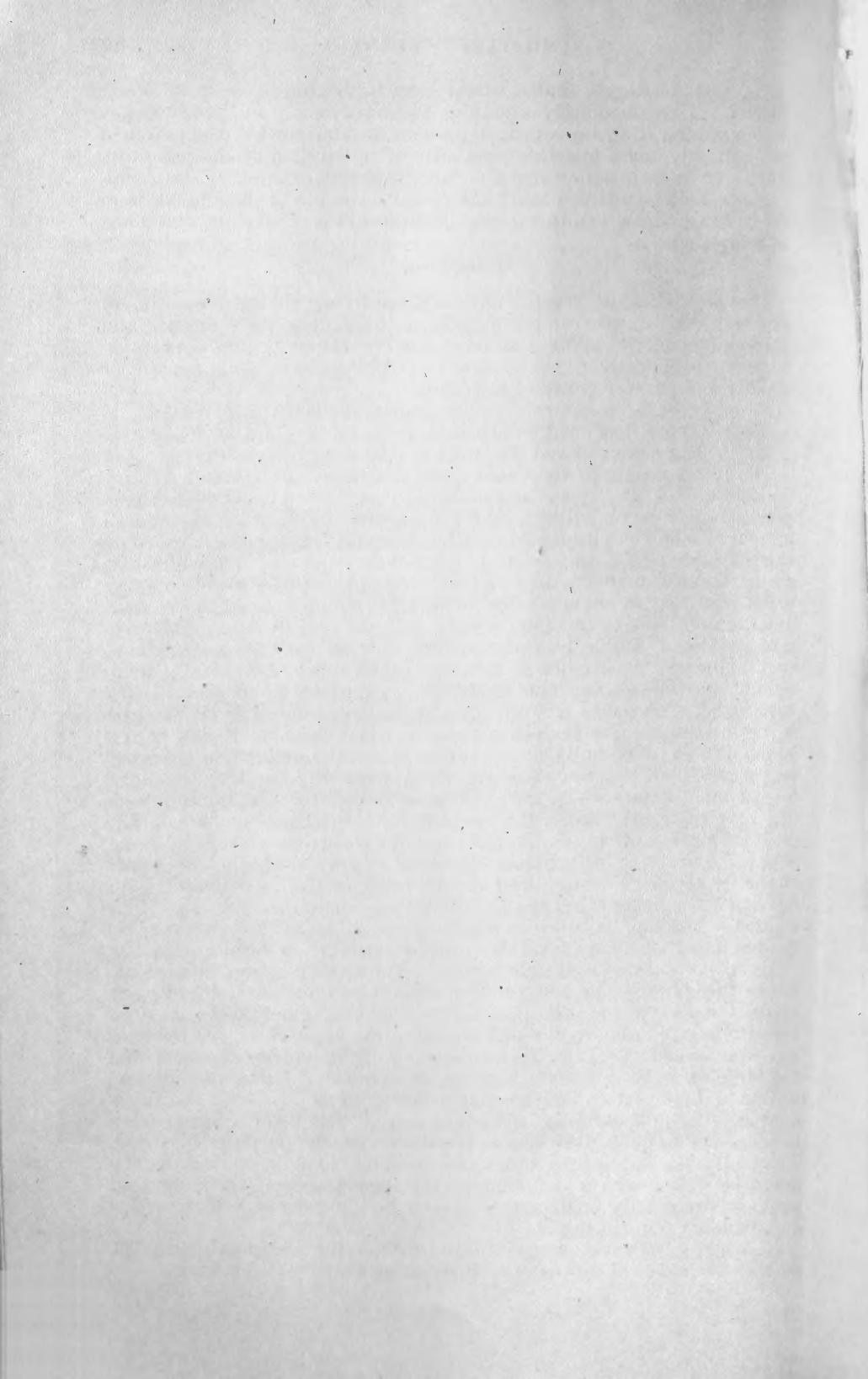
On all sides arise the statues and monuments that have been reared by loving hands to the memory of gallant soldiers who have died for their country. The very atmosphere is redolent of patriotism, honor, and chivalry. Surely there is nothing wanting here to stimulate to noble deeds.

The buildings are situated for the most part at the base of the mountain slope, while the broad level plain in front is devoted to the infantry exercises and evolutions of artillery and cavalry. The area in actual use does not exceed 200 acres. The topographical map accompanying this report exhibits that portion of the reservation in occupation.

Extensive as were the wise provisions made to secure that seclusion for the institution so essential to the maintenance of the discipline and training of the cadets, such has become the attractiveness of this region of country that population is crowding towards the Academy from the



THE PLAIN, WITH ENCAMPMENT IN THE DISTANCE.



southward to a degree that it would seem advisable to secure if possible the tract immediately adjoining the reservation on the south, belonging to the Kingsley estate, to prevent an undesirable occupation of that property and a too close proximity of possibly injurious influence. There can be no question that the topographical location of the Academy has been one of the most successful elements in the education of the cadets, and the maintenance of its seclusion is of all things the most to be desired.

BUILDINGS.

The population of West Point, or those living on the Government property, consists almost exclusively of the cadets, their officers and professors, and the soldiers enlisted for special service in connection with the institution. Three classes of buildings have been erected for the use and purposes of the institution:

First. Those devoted to the exclusive use of the Corps of Cadets.

Second. Those assigned as quarters to the officers and professors.

Third. Those erected and designed for the use of the soldiers.

The first consists of the cadet barracks, mess-hall, riding-hall, academic building, library and astronomical observatory, cadet chapel, hospital, administration building, and commissary building. These are all in near proximity to each other, within a nearly quadrangular space on the southerly end of the plain. All are built of stone. The cadet barracks recently erected is an L-shaped four-story edifice, with two sally-ports. It faces to the north and west, with an open court in the rear, and verandas on the two inner sides. It is divided by lateral hallways into a series of double sets of quarters, four on each floor, sixteen to each hallway. Each room is occupied by two cadets, generally members of the same class. The rooms are heated by steam and lighted with gas. Bath-rooms are provided in the basement, and every cadet is required to bathe a certain number of times each week, winter and summer. The mess-hall and hospital, also recently erected, are in every way adapted to the purposes for which they are designed, the mess for unmarried officers adjoining the cadet mess-hall. The library building requires remodeling and more room for the books it contains. The philosophical department, now occupying a portion of this building, should be provided with better accommodations elsewhere. The cadet chapel is not large enough and should be extended. The building for administrative offices and the riding-hall are ample for their uses. The academic building is in every respect unsuitable for the purposes required, and is in a dangerous condition, demanding *immediate* attention.

The lower floor, at one time used as a riding-hall, is now divided between the gymnasium and the department of chemistry, affording to neither the accommodation necessary. The two upper floors, used for section or recitation rooms and for the drawing classes, are liable at any time to collapse, from the insufficiency of the interior supports, and the building is at the same time in danger from destruction by fire, owing to its imperfect construction. No delay should be made in reconstructing this building. The plans submitted herewith show what is necessary to be done to render it suitable for the purposes intended. The recitation and lecture rooms, now used by the philosophical department, as well as those occupied by the department of chemistry and geology, are utterly inadequate. A new building devoted to these two departments is much needed.

No other institution of any rank in the country is so poorly supplied with these essential adjuncts to a scientific course of education.

At one time the Military Academy stood almost alone as a scientific school, while nearly all the colleges and universities of the country made the study of the classics the chief feature of their curriculum. Now, however, the study of the sciences has become an important element of education everywhere, and coincident with this development generous hands have come forward to aid by legacies and endowment the leading institutions of learning throughout the country in their efforts to promote the higher education of young men. This generous support was absolutely necessary, as without the requisite funds the large expense incident to this new departure could not have been met. The following table exhibits the enormous extent of this voluntary aid to education during the past ten years:

Statement showing aggregate amounts of gifts and legacies, from 1876 to 1885, inclusive, to several American colleges, &c.

Names and locations of the institutions.		1876 and 1877.	1878 and 1879.	1880 and 1881.	1882 and 1883.	1884 and 1885.	10 years, 1876 to 1885.
University of California.	Oakland, Cal.	\$700,000	\$225,000	\$75,000	\$90,815	.....	\$1,090,815
Yale College	New Haven, Conn.	20,500	191,727	445,970	553,000	\$111,138	1,322,335
Wesleyan University ..	Middletown, Conn.	27,301	150,000	394,400	2,000	32,604	606,305
Harvard University	Cambridge, Mass.	270,049	330,341	555,500	1,001,449	145,951	2,303,290
Tufts College	College Hill, Mass.	.....	14,000	155,000	169,000	36,036	374,036
Wellesley College	Wellesley, Mass.	.....	155,000	205,000	.....	29,000	389,000
Washington University.	Saint Louis, Mo.	141,000	.....	248,600	20,000	169,000	578,600
College of New Jersey ..	Princeton, N. J.	100,000	165,000	132,650	.....	269,536	667,186
Presbyterian Theological Seminary.	.....do	275,345	12,875	220,000	20,875	3,443	531,538
Cazenovia Seminary	Cazenovia, N. Y.	75,000	20,000	95,000	10,500	.....	200,500
Columbia College	New York, N. Y.	.....	2,250	650,000	5,000	558,875	1,216,125
General Theological Sem- inary (Episcopal).	.....do	24,800	.....	106,000	128,106	60,187	325,093
Union Theological Sem- inary (Presbyterian).	.....do	32,000	109,000	103,000	100,000	305,000	649,000
University of Rochester.	Rochester, N. Y.	3,103	7,000	281,800	46,706	25,000	363,609
Rochester Theological Seminary.	.....do	.....	156,000	123,000	100,000	70,000	455,000
Union College	Schenectady, N. Y.	130,600	84,000	153,554	.....	.....	368,154
University of Pennsyl- vania.	Philadelphia, Pa.	150,000	.....	200,000	142,782	86,324	579,106
Vanderbilt University ..	Nashville, Tenn.	320,000	100,000	150,000	150,000	210,000	930,000
University of Vermont ..	Burlington, Vt.	.....	185,375	58,150	23,000	105,000	371,525
University of Virginia ..	University of Vir- ginia P. O., Va.	205,000	51,000	144,000	.....	490,000	890,000
Tulane University of Louisiana.	New Orleans, La.	.....	.....	.....	1,500,000	500,000	.....
Aggregate for the schools above mentioned ..		2,474,698	1,958,068	4,406,633	4,062,733	3,219,004	16,211,226

For the whole of this period the Military Academy has received barely sufficient to maintain its normal condition, ignoring entirely the progressive developments at all the other centers of education. That this is a false economy and inconsistent with our national progress cannot be denied. What those great benefactors of their race who have devoted their wealth to the cause of education, like Stephen Girard, Peter Cooper, Johns Hopkins, Leland Stanford, Cornelius Vanderbilt, George Peabody, Paul Tulane, and others have done for the country at large Congress should be willing to do for its national schools, and that is to keep them up with the spirit of the age.

Large and munificent as have been these gifts to the leading colleges, the sum total of the contributions, great and small, to education at large in this country during the past ten years reaches nearly \$60,000,000.* No stronger argument is needed to encourage generous liberality on the part of Congress towards the institutions of learning under its care.

* See Appendix "D."

The gymnasium, which has become so important a feature in the education of the cadets, is also entirely inadequate. Gymnastic exercises are so admirably adapted to develop the physical condition of the young men, and fit them for the arduous duties they will be called upon to perform in their future career, that a separate building, constructed especially for this purpose, and fitted with all the appliances requisite for thorough athletic training, is urgently demanded. The quarters of the officers are most of them buildings erected some years ago, that have from time to time been repaired and enlarged. They are now in tolerable repair and, together with the alterations authorized at the last session of Congress to the old hospital building, are sufficient for present needs. The quarters occupied by the soldiers, located on the northerly slope of the Government grounds, have attracted the earnest attention of successive Boards of Visitors, and have been the subject of repeated and urgent recommendation. The truth is that these buildings and all the surroundings of this portion of the public grounds are simply a disgrace. The soldiers living here constitute an element of absolute necessity to the institution. Without their aid the education of the cadet could not well be accomplished. These soldiers should not only all be men possessing the highest physical and moral qualities of a soldier, but they should be encouraged to feel a pride in the duty assigned to them and a zeal in its discharge. Their quarters and the grounds around them should not only be suitable in every respect, but should possess all the appearance of order and neatness that characterize the buildings on the plain. A suitable appropriation for renovating the soldiers' barracks, for laying out and improving the grounds around them, for the construction of a proper building for the quartermaster's workshop and storehouse, and especially the substitution of a complete set of neat quarters for the married soldiers in place of the rookeries now occupied by them, and, in addition, a sufficient sum for perfecting the sanitary condition of the entire area devoted to the use of the soldiers, is demanded as of the first necessity. It has been found by experience at the Academy that married soldiers provided with quarters for their families are not only more steady in their habits, but, as a rule, more reliable and assiduous in their attention to duty. They become attached to the "Point" as their permanent home, and generally serve several terms of enlistment, thus giving to the Government the benefit of their experience and of the habits acquired by years of special training in specific duties. Hence the provision of comfortable quarters for these men is a matter of simple economy. The detailed report of the committee on public grounds, together with the correspondence connected therewith, affords valuable information on this subject, and is included in the appendix.*

The building used as a chapel for the soldiers is insufficient and unsuitable. The Board recommends an appropriation for a new building for this purpose, and also a small sum for its care and for the compensation of the clergymen of the different denominations who administer divine service.

No provision has heretofore been made for this purpose, although a number of cadets attend services at this chapel, some of them teaching the soldiers' children at Sunday-school.

INTERIOR POLICE AND DISCIPLINE.

The academic year begins on the 1st day of July of each year. At that time the cadets are in camp, where they remain until the 1st of

*Appendix A.

September; during this period the instruction is of a purely military character and includes all the duties of a camp performed in the most rigid manner, the cadets doing the most exacting duties of a private soldier, the new class being then in uniform and drilling with the other classes.

On the 1st of September the cadets return to barracks and the regular course of studies begins. The academic building, where the recitations take place, adjoins the barracks. The several classes are divided into sections of twelve, and each section has its particular section or recitation room.

For instruction in infantry tactics and military police and discipline the cadets are organized into a battalion of four companies, under the commandant of cadets, and assigned to quarters accordingly, each company being under the command of an officer of the Army, designated as assistant instructor of tactics.

The officers and non-commissioned officers are appointed by the Superintendent from a list submitted by the commandant of cadets. The selection is made from those cadets who have been most studious, soldier-like in the performance of their duties, and most exemplary in their general deportment. In general, the officers are taken from the first class, the sergeants from the second class, and the corporals from the third class.

When in barracks there is a military exercise for instruction every day when the weather is favorable (Saturdays and Sundays excepted), between 4 and 6 o'clock p. m. Each exercise continues at least one hour, and does not exceed one hour and a half. When in camp the exercises are at such times as may be directed.

The weather permitting, there is a dress parade at retreat daily, and at troop, when in camp, at such times as the Superintendent may direct.

There is an inspection of the battalion under arms every Sunday morning, when the weather permits. No military duty or exercise for instruction is performed on Sunday.

No cadet is allowed to be absent from any duty whatever without permission from the Superintendent, unless excused on sick-report.

Hours for daily duties.

Reveille at 5.30 o'clock a. m. in camp, and at 6 o'clock a. m. in barracks.

Police-call, 5 minutes after reveille, in camp, and 6.20 o'clock a. m. in barracks; and at 4 o'clock p. m. in camp, except Saturdays and Sundays, when it is at 5 o'clock p. m.

Surgeon's-call, fifteen minutes after reveille.

The signal for breakfast, at 6 o'clock a. m. in camp, and at 6.30 o'clock a. m. in barracks.

Troop, at 8 o'clock a. m.

The signal for dinner, at 1 o'clock p. m.

Retreat, at sunset.

Supper immediately after evening parade, except that at no time shall it be earlier than half past 5 o'clock p. m.

Call-to-quarters, in barracks, at 8 o'clock a. m., 2 o'clock p. m., and thirty minutes after return from supper; and on Sunday, morning call-to-quarters is sounded thirty minutes after inspection, and afternoon call-to-quarters at 3 o'clock p. m.

Tattoo, at 9.30 o'clock p. m.

Taps, the signal to extinguish lights, at 10 o'clock p. m.

Church-call, at 11 o'clock a. m. on Sundays.

POLICE ADMINISTRATION AND FISCAL AFFAIRS.

The police administration of the Academy is in a large measure maintained through the agency of the detachments of soldiers who are en-

listed for special purposes connected with the institution. Of these there are—

Artillery detachment.....	114
Cavalry detachment	68

To which are added—

General-service clerks.....	4
Field music	14
Band	24

The cavalry detachment has charge of the horses used in cavalry and artillery drills, acting as riders in the latter. The duties of the artillery detachment are divided as follows:

Clerks	3
Overseers.....	4
School teachers	2
Mechanics (painters 4, carpenters 9, plumber 1, blacksmiths 3, tinsmith 1, masons 2, saddler 1, wheelwright 1, draughtsman 1, painter 1)	24
Laborers (18 are employed on general work in care of public grounds—about 200 acres—all roads, fences, and general police on the reservation; the balance of the 53 laborers are employed as watchmen, policemen, and in the various departments of instruction).....	53
Teamsters	25
Detached service.....	1
Cooks for the detachment	2

Total

114

The most remarkable feature in the above list is that but 18 men are required in the general care of the public grounds of 200 acres in extent, while these grounds, as every one knows who sees them, are always in an admirable condition. Everything that is required for maintaining the sanitary condition and general cleanliness of the post, all the manual labor necessary in the different departments of instruction, in the care of the steam-heating apparatus, in the manufacture of gas, the water supply attending the bath-rooms, in short, the whole comfort and convenience of the Academy, its professors, officers, and cadets, the entire care of the public domain and Government property, is maintained by the industry of this small body of men under a system of police administration so well and so economically conducted that it is entitled to the warmest commendation. The most perfect order is maintained day and night, and everything in and around the institution exhibits at all times the regularity of clock-work.

FISCAL AFFAIRS.

The fiscal affairs of the Academy are in charge of Capt. William F. Spurgeon, Twenty-fourth United States Infantry. This officer is quartermaster and commissary of cadets, and treasurer of the Military Academy. His duties embrace the receipt and expenditures of all moneys appropriated for the maintenance of the cadets.

The subcommittee states that the fiscal affairs were carefully and thoroughly investigated, the officer in charge rendering every facility to the committee to enable them to possess themselves of full information in reference to every expenditure however minute. The accounts are admirably kept and show at a glance the exact condition of the funds, and a detailed statement of expenditure. The committee present herewith a bimonthly statement of the accounts, to show the form in which they are kept.* These statements are made and the accounts

* See Appendix B.

are subjected to an inspection every two months by an inspecting officer of the post having no connection with the control or management of the funds.

The management of the post and cadet funds by the officer in charge deserves the highest commendation; the expenditures are made in such manner as will promote the comfort and welfare of the cadet. The supplies are purchased at the cheapest rates and no waste is permitted, every effort being made to utilize everything of value so as to increase the variety and quality of the rations for the cadets' mess, with a result highly satisfactory to the cadets, and general satisfaction exists where once grumbling held chief place.

It is not often that in positions of the kind held by the treasurer of the post and cadet fund the occupant is found so thoroughly devoted to his duty and to the interest given him in charge as in the case of the present treasurer at West Point.

The committee are fully satisfied with the management of the fiscal affairs given them to examine, and bear their testimony to the faithful administration of the treasurer. The duties of the fiscal officer include the very important duty of providing the necessary food for the cadets, and its proper preparation. No more responsible position could be held in connection with the Military Academy, and no one who is not peculiarly fitted for these duties could discharge them with satisfaction. There is nothing connected with the life of a soldier upon which so much depends as the proper cooking of his ration. At the same time, there is nothing a soldier suffers from more than badly cooked food. Indeed, it may safely be said that the cooks are the curse of the Army; they destroy more lives than the cannon of the enemy, and can do more to disable an army than a pitched battle. Even more important is this matter of cooking to the young men who are being trained for a soldier's life and a soldier's duties. The close and unremitting attention to study demanded from the cadet, as well as the constant drill and exercise to which he is subject, requires above all things that the food furnished to him should be of the most nutritive character and so prepared as to be readily digested. This has not always been the case at the Academy. For a number of years the furnishing of food to the cadets was let out by contract, with results that many look back upon with no other feeling than disgust. Badly cooked and tainted meat was more the rule than the exception. Meals served in a filthy manner, nauseating slops instead of properly prepared coffee and tea, rancid butter, and sour bread—these are some of the reminiscences which older graduates retain in their memories of their cadetship. To leave the table hungry and in disgust was a common occurrence, and what a gross wrong and injustice! How could it be expected that under such circumstances a cadet could study or perform his duties properly?

The present system is not only an immeasurable improvement on that of former years in the quality and preparation of the food, but, in addition, it is now served in a cleanly, orderly, and refined manner, in the place of the former offensive surroundings. The very odor of the old mess was revolting to an extreme degree. The present arrangement and conduct of the cadet mess seems to the Board of Visitors to be above criticism, and the economic management by which such a variety is secured at such a reasonable cost is certainly worthy of all praise.

Captain Spurgeon undoubtedly possesses rare qualities for the duties to which he has been assigned. The eminent success of his administration of the commissary department could not have been accomplished without a peculiar talent, not readily found, and the Board unites in the



CADET MESS HALL.

recommendation that no change be made in this officer's detail so long as he is able and willing to perform his duty as he is now doing.

In reviewing the whole subject of public education as exhibited at the Military Academy, the Board have in mind the many discussions and numerous questions that have from time to time arisen in regard to the utility of the institution and the methods pursued, not only as to the admission of cadets but their subsequent education and training. Within the last few years there has been developed a tendency on the part of members of Congress, when called upon by the Secretary of War or Navy to nominate a cadet for the Military or Naval Academy, to open the selection to public competition, appointing a voluntary board of examiners for this purpose, and giving the appointment to the one standing highest on the list, instead of making an individual appointment. Not all the members of Congress, however, follow this rule. It becomes a matter of interest, therefore, to determine what are the comparative merits of the two methods pursued. To this end the Superintendent of the Academy has caused to be prepared a table showing the relative standing of the cadets for those successive years embraced in the two methods of appointment.

From the following table will be seen how candidates appointed after competition and without competition have stood the test of the entrance examinations from 1873 to 1886, inclusive:

Years.	Competitive.		Direct.		Years.	Competitive.		Direct.	
	Admit- ted.	Defi- cient.	Admit- ted.	Defi- cient.		Admit- ted.	Defi- cient.	Admit- ted.	Defi- cient.
1873	57	10	61	58	1882	62	12	67	39
1874	26	10	63	56	1883	69	12	72	44
1875	46	20	75	47	1884	40	12	56	30
1876	38	11	60	42	1885	41	7	54	26
1877	46	27	50	60	1886	74	25	54	20
1878	40	6	62	39	Total.....	650	199	811	548
1879	46	13	42	21					
1880	52	10	41	24	Percent....	77	23	60	40
1881	33	18	52	42					

The following table shows the number of cadets admitted from 1873 to 1882, inclusive, exhibiting separately the number who have successfully graduated, as well as the casualties, under each mode of appointment:

Years of entering.	Total number ad- mitted.	Appointed by competition.						Appointed directly.					
		Graduated.	Resigned.	Discharged.	Dismissed.	Died.	Total.	Graduated.	Resigned.	Discharged.	Dismissed.	Died.	Total.
1873	118	34	3	10	-----	-----	47	42	10	19	-----	-----	71
1874	89	13	4	10	1	-----	28	27	10	22	2	-----	61
1875	121	30	8	6	2	-----	46	34	18	22	1	-----	75
1876	98	23	4	16	-----	2	45	24	11	16	1	-----	58
1877	96	36	4	11	-----	-----	51	20	8	13	4	-----	45
1878	102	22	7	13	1	-----	43	17	23	19	-----	-----	59
1879	88	29	4	14	-----	-----	47	13	14	14	-----	-----	41
1880	73	23	3	5	1	-----	32	14	12	15	-----	-----	41
1881	85	19	6	8	-----	-----	33	24	10	18	-----	-----	52
1882	129	40	7	12	-----	1	60	35	11	23	-----	-----	69
Totals.....	999	269	50	105	5	3	432	250	127	181	8	1	567

Competitive:	Per cent.
Graduated	63
Failed to graduate	37
Direct:	
Graduated	45
Failed to graduate	55

Thus showing that the percentage is in favor of competitive examination so far as intellectual capacity is concerned.

The point has also been raised that the tendency of the institution is undemocratic; that the methods of appointment and the course of education develops an exclusive class, removed from the great body of the people, with associations and habits uncongenial and unadapted to republican institutions. It is therefore an additional matter of interest to learn the conditions of life from which these cadets have sprung; and as the best method of obtaining this information the occupation of the father of each cadet appointed during a certain period is selected as defining his social status at the time of entering the Academy.

Occupation of fathers of candidates for admission.

Occupations.	Num-ber.	Occupations.	Num-ber.
Author	1	Undertakers	4
Artist	1	Enlisted men	4
Auctioneer	1	Nurserymen	5
Brewer	1	Dentists	7
Butcher	1	Secretaries	8
Collector	1	Speculators	10
Conductor	1	Heads of corporations	10
Cook	1	Mining	11
Detective	1	Real estate	11
Distiller	1	Insurance	12
Inspector of police	1	Liverymen	12
Chief of police	1	Laborers	13
Saloon-keeper	1	Officers of volunteers	19
Superintendent of prison	1	Professors	21
Messenger	1	Ship-captains	22
Museum-keeper	1	State officers	23
Theater-manager	1	Members of Congress	23
Prison warden	1	Contractors	24
Wagon-master	1	Brokers	27
Tanner	1	Railroad	29
Steward	1	Engineers	34
Builders	2	Unknown	65
Musicians	2	Editors	39
Overseers	2	School-teachers	39
Policemen	2	Hotel-keepers	42
Politicians	2	Agents	47
Printers	2	Officers of the Navy	52
Architects	3	Officers of the Army	243
Barbers	3	Bankers and bank officers	55
Gardeners	3	Clerks	58
Journalists	3	County officers	61
Photographers	3	United States civil officers	69
Stock dealers	3	Manufacturers	93
Bakers	4	Clergymen	102
Lumbermen	4	No occupation	179
Millers	4	Mechanics	263
Presidents of colleges	4	Physicians	271
Publishers	4	Lawyers and judges	455
Superintendents of schools	4	Merchants	495
Surveyors	4	Farmers and planters	827

It will be seen that merchants, farmers, and lawyers form the great majority, while nearly all the trades and industries are represented from the lowest to the highest. The table is a complete refutation of the charge of exclusiveness or favoritism in regard to appointments.

It has been further asserted that the qualifications required for admission and the standard of the preliminary examination are too high.

What these requirements are is clearly set forth in the subjoined circular:

Information relative to the appointment and admission of cadets to the U. S. Military Academy.

APPOINTMENTS.

How made.—Each Congressional district and Territory—also the District of Columbia—is entitled to have one cadet at the Academy. Ten are also appointed *at large*. The appointments (except those *at large*) are made by the Secretary of War at the request of the Representative, or Delegate, in Congress from the district or Territory; and the person appointed must be an actual resident of the district or Territory from which the appointment is made. The appointments *at large* are specially conferred by the President of the United States.

Manner of making applications.—Applications can be made at any time, by letter to the Secretary of War, to have the name of the applicant placed upon the register that it may be furnished to the proper Representative, or Delegate, when a vacancy occurs. The application must exhibit the full name, exact age, and permanent abode of the applicant, with the number of the Congressional district in which his residence is situated.

Date of appointments.—Appointments are required by law to be made one year in advance of the date of admission, except in cases where, by reason of death or other cause, a vacancy occurs which cannot be provided for by such appointment in advance. These vacancies are filled in time for the next annual examination.

Alternates.—Should the Representative, or Delegate, in Congress have reason to doubt the success of his nominee in passing the entering examination, he can nominate a legally-qualified *alternate*. The alternate will be examined with the regular nominee, and admitted in the event of his success and the latter's failure to pass the prescribed preliminary examinations. The alternate, like the nominee, should be designated as nearly one year in advance of date of admission as practicable.

ADMISSION OF CADETS.

A candidate upon receiving his appointment is ordered to report at West Point to the Superintendent of the Military Academy in time to appear before the Academic Board for examination at its meeting early in June, unless there be good reasons for designating another time.

The candidate, soon after his arrival at West Point, is subjected to a rigid physical examination by a board of experienced surgeons of the Army. If he passes successfully this examination, he is then examined by the Academic Board. These examinations are made with as little delay as practicable after the candidate reports to the Superintendent.

The candidate who passes successfully these examinations is admitted, at once, to the Academy without returning to his home. In January following, he is subjected to another academical examination, and if he passes this one successfully, he receives a *warrant* as cadet and is required to sign articles binding himself to serve the United States eight years from the time of his admission to the Academy, unless sooner discharged.

Qualifications.—The age for the admission of cadets to the Academy is between seventeen and twenty-two years. Candidates must be unmarried, at least five feet in height, free from any infectious or immoral disorder, and generally from any deformity, disease, or infirmity which may render them unfit for military service. They must be well versed in reading, in writing, including autography, in arithmetic, and have a knowledge of the elements of English grammar, of descriptive geography (particularly of our own country), and of the history of the United States.

Each cadet, upon his admission, shall take the oath of office prescribed by law, and before receiving his warrant shall, in the presence of the Superintendent, or of some officer deputed by him, subscribe to an engagement in the following form:

[United States Military Academy.]

I, ———, of the State of ———, aged ——— years ——— month, having been selected for appointment as a cadet in the Military Academy of the United States, do hereby engage, with the consent of my (parent or guardian), in the event of my receiving such appointment, that I will serve in the Army of the United States for eight years, unless sooner discharged by competent authority. And I, ———, do solemnly swear that I will support the Constitution of the United States, and bear true allegiance to the National Government; that I will maintain and defend the

sovereignty of the United States paramount to any and all allegiance, sovereignty, or fealty I may owe to any State, county, or country whatsoever; and that I will at all times obey the legal orders of my superior officers, and the rules and articles governing the armies of the United States.

Sworn and subscribed to at ———, this — day of ———, eighteen hundred and ———, before

CHARACTER OF EXAMINATIONS.*

PHYSICAL EXAMINATION.

Every candidate is subjected to a rigid physical examination, and if there is found to exist in him any of the following causes of disqualification to such a degree as would immediately, or at no very distant period, impair his efficiency, he is rejected:

1. Feeble constitution and muscular tenuity; unsound health from whatever cause; indications of former disease; glandular swellings or other symptoms of scrofula.
2. Chronic cutaneous affections, especially of the scalp.
3. Severe injuries of the bones of the head; convulsions.
4. Impaired vision, from whatever cause; inflammatory affections of the eyelids; immobility or irregularity of the iris; fistula lachrymalis, &c.
5. Deafness; copious discharge from the ears.
6. Loss of many teeth, or the teeth generally unsound.
7. Impediment of speech.
8. Want of due capacity of the chest and any other indication of a liability to a pulmonic disease.
9. Impaired or inadequate efficiency of one or both of the superior extremities on account of fractures, especially of the clavicle, contraction of a joint, extenuation, deformity, &c.
10. An unusual excurvature or incurvature of the spine.
11. Hernia.
12. A varicose state of the veins of the scrotum or spermatic cord (when large), sarcocele, hydrocele, hemorrhoids, fistulas.
13. Impaired or inadequate efficiency of one or both of the inferior extremities on account of varicose veins, fractures, malformation (flat feet, &c.), lameness, contraction, unequal length, bunions, overlying or supernumerary toes, &c.
14. Ulcers, or unsound cicatrices of ulcers likely to break out afresh.

ACADEMICAL EXAMINATION.

Reading.—In reading, candidates must be able to read understandingly with proper accent and emphasis.

Writing and orthography.—In writing and orthography, they must be able, from dictation, to write sentences from standard pieces of English literature, both prose and poetry, sufficient in number to test their qualifications both in handwriting and orthography.

Arithmetic.—In arithmetic, they must be able—

- 1st. To explain, accurately and clearly, its objects and the manner of writing and reading numbers—entire, fractional, compound, or denominate.
- 2d. To perform with facility and accuracy the various operations of addition, subtraction, multiplication, and division of whole numbers, abstract and compound or denominate, giving the rule for each operation, *with its reasons*, and also for the different methods of proving the accuracy of the work.
- 3d. To explain the meaning of reduction—its different kinds, its application to denominate numbers in reducing them from a higher to a lower denomination and the reverse, and to equivalent decimals; to give the rule for each case, *with its reasons*, and to apply readily these rules to practical examples of each kind.
- 4th. To explain the nature of prime numbers, and factors of a number—of a com-

*It is suggested to all candidates for admission to the Military Academy that, before leaving their place of residence for West Point, they should cause themselves to be thoroughly examined by a competent physician, and by a teacher or instructor in good standing. By such an examination any serious physical disqualification or deficiency in mental preparation would be revealed, and the candidate probably spared the expense and trouble of a useless journey and the mortification of rejection.

It should be understood that the informal examination herein recommended is solely for the convenience and benefit of the candidate himself, and can in no manner affect the decision of the academic and medical examining boards at West Point.

NOTE.—There being no provision whatever for the payment of the traveling expenses of either accepted or rejected candidates for admission, no candidate should fail to provide himself in advance with the means of returning to his home, in case of his rejection before either of the examining boards, as he may otherwise be put to considerable trouble, inconvenience, and even suffering on account of his destitute condition. If admitted, the money brought by him to meet such a contingency can be deposited with the treasurer on account of his equipment as a cadet, or returned to his friends.

mon divisor of two or more numbers, particularly of their *greatest common divisor*—with its use, and to give the rule, *with its reasons*, for obtaining it; also the meaning of a common multiple of several numbers, particularly of their *least common multiple* and its use, and to give the rule, *with its reasons*, for obtaining it, and to apply each of these rules to examples.

5th. To explain the nature of fractions, common or vulgar, and decimal—to define the various kinds of fractions, with the distinguishing properties of each—to give all the rules for their reduction; particularly from mixed to improper and the reverse—from compound or complex to simple—to their lowest terms—to a common denominator—from common to decimal and the reverse; for their addition—subtraction—multiplication and division, *with the reason* for each change of rule, and to apply each rule to examples.

6th. To define the terms ratio and proportion—to give the properties of proportion and the rules, and *their reasons*, for stating and solving questions in both simple and compound proportion, or single and double rule of three, and to apply these rules to examples.

7th. The candidates must not only know the principles and rules referred to above, but they are required to possess such a thorough understanding of all the fundamental operations of arithmetic as will enable them to combine the various principles in the solution of any complex problem which can be solved by the methods of arithmetic. In other words, they must possess such a complete knowledge of arithmetic as will enable them to take up at once the higher branches of mathematics without further study of arithmetic.

8th. It is to be understood that the examination in these branches may be either written or oral, or partly written and partly oral—that the definitions and rules must be given fully and accurately, and that the work of all examples, whether upon the blackboard, slate, or paper, must be written plainly and in full, and in such a manner as to show clearly the mode of solution.

The following examples and questions in arithmetic are a few of those which have been used at past examinations. They are given in order to indicate more clearly what is required, but it should be distinctly understood that entirely different ones are used each year.

Multiply 4.32 by .00012.

Explain the reason for placing the decimal point in the answer. [*The rule for so doing is not the reason.*]

$$5\frac{1}{2} + \frac{7\frac{1}{2}}{0.5} - 0.725$$

Reduce $\frac{4 + 3.45}{2\frac{1}{2}}$ to an equivalent decimal.

Divide 3380321 by MDCCXCIX, and express the quotient by the Roman system of notation.

Change .013 to an equivalent fraction whose denominator is 135.

Find the greatest common divisor of 261, 285, and 297.

How many men would be required to cultivate a field of $2\frac{1}{2}$ acres in $5\frac{1}{2}$ days of 10 hours each, if each man completed 77 square yards in 9 hours?

Separate $772\frac{3}{4}$ in three numbers, which shall be in the same proportion as $2\frac{1}{2}$, $\frac{1}{5}$, $\frac{1}{10}$.

Five cubic feet of gold weigh 98.20 times as much as a cubic foot of water, and 2 cubic feet of copper weigh 18 times as much as a cubic foot of water; how many cubic inches of copper will weigh as much as $\frac{1}{4}$ of a cubic inch of gold?

Find the least common multiple for the numbers $\frac{1}{2}$, 2.1, 5.25, $\frac{1}{4}$.

A wins 9 games out of 15 when playing against B, and 16 out of 25 when playing against C. How many games out of 118 should C win when playing against B?

A and B run a race, their rates of running being as $1\frac{1}{2}$ to 18. A runs $2\frac{1}{2}$ miles in 16 minutes and 48 seconds, and B runs the entire distance in 34 minutes. What was the entire distance?

A and B can do a piece of work in 4 hours, A and C in $3\frac{1}{2}$ hours, B and C in $5\frac{1}{2}$ hours. In what time can A do it alone?

English shillings are coined from a metal which contains 37 parts of silver to 3 parts of alloy; one pound of this metal is coined into 66 shillings. The United States silver dollar weighs 412.5 grains, and consists of 9 parts silver to 1 of alloy. What fraction of the U. S. dollar will contain the same amount of silver as one English shilling?

Give the rule for reducing a decimal of a given denomination to integers of lower denominations.

What is the effect of dividing the denominator of a fraction by a whole number, and why?

Explain the difference between a common fraction and decimal.

What is the effect of annexing a cipher to a decimal, and why?

If the same number be subtracted from both terms of an improper fraction, what will be the effect? Why?

Give the rule for reducing a common fraction to an equivalent decimal, and explain why the resulting decimal will be equal to the common fraction from which it is obtained.

Give the rule for dividing one decimal by another, and explain why the decimal point in the quotient is placed where the rule directs.

Define reduction, and state the different kinds.

Grammar.—In English grammar candidates must be able—

1. To define the parts of speech, and give their classes and properties; to give inflections, including declension, conjugation, and comparison; to give the corresponding masculine and feminine gender-nouns; to give and apply the ordinary rules of syntax.

2. To parse fully and correctly any ordinary sentence, omitting rules, declensions, comparisons, and principal parts, but giving the subject of each verb, the governing word of each objective case, the word for which each pronoun stands or to which it refers, the words between which each preposition shows the relation, precisely what each conjunction connects, what each adjective and adverb qualifies or limits, the construction of each infinitive, and, generally, showing a good knowledge of the function of each word in the sentence. Omissions will be taken to indicate ignorance.

3. To correct in sentences or extracts any ordinary grammatical errors, such as are mentioned and explained in ordinary grammars.

It is not required that any particular grammarian or text-book shall be followed; but rules, definitions, parsing, and corrections must be in accordance with good usage and common sense. The examination may be written or oral, or both written and oral.

Geography.—Candidates will be required to pass a satisfactory examination, written or oral, or both, in geography, particularly of our own country. To give a candidate a clear idea of what is required, the following synopsis is added to show the character and extent of the examination. Questions are likely to be asked involving knowledge of:

1st. Definitions of the geographical circles, of latitude and longitude, of zones, and of all the natural divisions of the earth's surface as islands, seas, capes, &c.

2d. The continental areas and grand divisions of the water of the earth's surface.

3d. The grand divisions of the land—the large bodies of water which in part or wholly surround them.

Their principal mountains, location, direction and extent; the capes, from what parts they project and into what waters?

Their principal peninsulas, location, and by what waters are they embraced?

The parts connected by an isthmus, if any;

Their principal islands, location, and surrounding waters;

The seas, gulfs, and bays, the coasts they indent, and the waters to which they are subordinate;

The straits, the lands they separate, and the waters they connect;

Their principal rivers, their sources, directions of flow, and the waters into which they empty;

Their principal lakes, location, and extent.

4th. The political divisions of the grand divisions.

Their names, locations, boundaries, and capitals; general questions of the same character as indicated in the second section made applicable to each of the countries of each of the grand divisions.

5th. The United States.

The candidate should be thoroughly informed as to its general features, configuration, location, and boundaries (both with respect to neighboring countries, and latitude and longitude); its adjacent oceans, seas, bays, gulfs, sounds, straits, and islands; its mountain ranges, their location and extent; the sources, directions, and terminations of the important rivers and their principal tributaries, the lakes, and, in short, every geographical feature of the country as indicated above. The location and termination of important railroad lines and other means of communication from one part of the country to another should not be omitted.

The States and Territories are to be accurately located with respect to each other by their boundaries, and as to their order along the Atlantic Coast, the Gulf of Mexico, the Pacific Coast, the Northern frontier, the Mexican frontier, and the Mississippi, Missouri, and Ohio Rivers.

The boundary and other large rivers of each State, as well as all other prominent geographical features should be known.

The names and locations of their capitals, and other important cities and towns are likewise to be known.

In short, the knowledge should be so complete that a clear mental picture of the whole or any part of the United States is impressed on the mind of the candidate.



CADETS AT FIELD-ARTILLERY DRILL.

More weight is attached to a knowledge of the geography of the United States than to that of all other countries combined.

History.—The candidate should make himself familiar with so much of the *History of the United States* as is contained in the ordinary school histories. The examination may be written or oral, or partly written and partly oral, and will usually consist of a series of questions, similar to the following:

I. Name the earliest European settlements within the present limits of the United States—when, where, and by whom made? When did the settlements made by other nations than the English come under the Dominion of Great Britain, and of the United States?

II. What was the difference between the royal, the chartered, and the proprietary colonies? How many colonies were there originally in Massachusetts and Connecticut? When were they united? How many in Pennsylvania? When were they separated?

III. In what wars were the colonies engaged before the Revolution? What were the principal events and results of those of King William, Queen Anne, King George, and the French and Indian?

IV. What were the remote and the immediate causes of the American Revolution? Explain the navigation act, the stamp act, writs of assistance. When did the war of the Revolution properly begin? When, where, and how did it end? Give the particulars of Arnold's treason. Who were the most prominent generals in this war? Name the most important battles and their results.

V. The Constitution of the United States: Why and when was it formed? When was it adopted?

VI. Give the names of the Presidents of the United States in their order. Give the leading events of the administration of each one; for example, that of—

WASHINGTON.—Indian war; trouble with France; Jay's treaty; the whisky rebellion, &c.

JEFFERSON.—War with Tripoli; purchase of Louisiana; the embargo, &c.

MADISON.—War of 1812; its causes; the principal battles on land and sea; peculiarity of its last battle; when ended, &c.

MONROE.—Indian war; cession of Florida; Missouri compromise, &c.

JACKSON.—Black Hawk and Seminole wars; the United States Bank; nullification, &c.

POLK.—The Mexican war; its causes; principal battles; result of it, &c.

PIERCE.—Repeal of Missouri compromise; troubles in Kansas, &c.

BUCHANAN.—Civil war; how begun, &c.

LINCOLN.—War of secession; its causes; its results, social and political; explain doctrine of State sovereignty; alienation between Northern and Southern States; doctrine of secession; give an account of principal battles.

JOHNSON.—Fourteenth amendment; tenure of office bill; Johnson's impeachment.

GRANT.—Fifteenth amendment; Alabama claims and treaty of Washington; electoral commission.

ACADEMIC DUTIES.

The academic duties and exercises commence on the 1st of September and continue until the 1st of June. Examinations of the several classes are held in January and June, and, at the former, such of the new cadets as are found proficient in studies and have been correct in conduct are given the particular standing in their class to which their merits entitle them. After each examination, cadets found deficient in conduct or studies are discharged from the Academy, unless the Academic Board for special reasons in each case should otherwise recommend. Similar examinations are held every January and June during the four years comprising the course of studies.

These examinations are very thorough, and require from the cadet a close and persevering attention to study, without evasion or slighting of any part of the course, as no relaxations of any kind can be made by the examiners.

Military instruction.—From the termination of the examination in June to the end of August the cadets live in camp, engaged only in military duties and exercises, and receiving practical military instruction.

Except in extreme cases, cadets are allowed but one leave of absence during the four years' course. As a rule, the leave is granted at the end of the first two years' course of study.

PAY OF CADETS.

The pay of a cadet is \$540 per year, to commence with his admission to the Academy, and is sufficient, with proper economy, for his support. No cadet is permitted to receive money or any other supplies from his parents, or from any person whomsoever, without the sanction of the Superintendent.

Cadets are required to wear the prescribed uniform. All articles of their clothing are of a uniform pattern, and are sold to cadets at West Point at regulated prices.

EXPENSES OF CANDIDATES PRIOR TO ADMISSION.

The expenses of a candidate for board, washing, lights, &c., after he has reported and prior to admission, will be about \$10. Immediately after being admitted to the institution he must be provided with an outfit of uniform, the cost of which will be about \$90, making a total sum of \$100, which must be deposited with the treasurer of the Academy before the candidate is admitted. It is best for a candidate to take with him no more money than will defray his traveling expenses, and for the parent or guardian to send to "*The Treasurer U. S. Military Academy*" the required deposit of \$100. Any deviation from the rule as to the amount or manner of making the deposit must be explained in writing, by the parent or guardian of the candidate, to the Superintendent of the Academy.

ASSIGNMENT TO CORPS AFTER GRADUATION.

The attention of applicants and candidates is called to the following provisions of an act of Congress approved May 17, 1886, to regulate the promotion of graduates of the United States Military Academy.

That when any cadet of the United States Military Academy has gone through all its classes and received a regular diploma from the academic staff he may be promoted and commissioned as a second lieutenant in any arm or corps of the Army in which there may be a vacancy and the duties of which he may have been judged competent to perform; and in case there shall not at the time be a vacancy in such arm or corps, he may, at the discretion of the President, be promoted and commissioned in it as an additional second lieutenant, with the usual pay and allowances of a second lieutenant, until a vacancy shall happen.

GENERAL QUALIFICATIONS.

A sound body and constitution, suitable preparation, good natural capacity, an aptitude for study, industrious habits, perseverance, an obedient and orderly disposition, and a correct moral deportment are such essential qualifications, that candidates knowingly deficient in any of these respects should not, as many do, subject themselves and their friends to the chances of future mortification and disappointment by accepting appointments at the Academy and entering upon a career which they cannot successfully pursue.

The Academy can in no sense be regarded as a primary school, or one of a beneficent character. The very nature of the institution is that of a school of instruction in those branches of technical knowledge relating almost exclusively to the science of war in order to secure men for the military service of the Government. Purely elementary knowledge must necessarily be acquired elsewhere. The task of education could not be accomplished in four or even six years if the rudiments were to be included in the course of study. It is interesting in this connection to show the extent and character of the previous education of the cadets now at the Academy, as indicating the average preparation of those who have successfully acquired a standing in their classes.

Cadets of the United States Military Academy, entering in 1883, showing time of attendance at school, time employed in private study, and time employed as teacher during the five years previous to admission to the academy.

CLASS OF 1887—ADMITTED IN 1883.

[This data was taken March 5, 1884.]

1883.	Time of attendance at school.						Time employed in private study.	Time employed as teacher.
	Public.		Private.		Normal school or academy.	University or college.		
	Common.	High.	Common.	High.				
	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.
1								2 0
2							1 0	
3				5 0				3 0
4		1 0	1 0				1 0	
5								
6		3 0					8	
7		2 8						
8		4 0						
9	3 0					2 0	1 0	
10		3 0						
11		1 0		2 8				
12							6	
13		2 0				1 0	1 0	
14					10	4		11
15		2 5						6
16					7 1	1 0		
17					1 4			6
18						2 0		
19		2 0				7		1 0
20		1 0						
21				2 0		3 0		
22		1 8						6
23	1 0					1 5		
24		4 0						
25					4 0		6	
26			1 0			1 4		
27	2 0		1 3				10	
28	3 5		1 5					
29		4						
30								
31	2 3					2 0		
32						7	1	3
33						0	4	0
34	2 0					4	4	
35		2 0						
36		1 4			1 8	1 8	1 0	
37					1 0			2 0
38				2 0		2 3		
39			2 11					
40	1 10	1 4				8		6
41					3 0			6
42	6							
43		3 0				1 8		
44	1 0						9	1 0
45		2 0			1 7	1 0	3	
46			3 0	2 0			3	
47	5					1 0	4	
48		10					2 6	8
49					1 5	2 0		
50		4 0					1 0	
51	3 0	6				8		
52	3 0							
53		5					3	
54					3 5			1 5
55			1 0	4 0				
56		1 0					3	
57			10	4			2	
58		2 0			3			
59	7			7			8	5
60		1 0			6	2 0		1 6
61				2 0		1 0		
62	1 1	7						10
63					2 0			
64		1 0		3 0				
65								
66					3 5	1 7		
67		3 5						
68						4		

Cadets of the United States Military Academy, &c.—Continued.

CLASS OF 1887—ADMITTED IN 1883—Continued.

1883.	Time of attendance at school.						Time employed in private study.	Time employed as teacher.
	Public.		Private.		Normal school or academy.	University or college.		
	Common.	High.	Common.	High.				
Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	
69.....		2 0		4				
70.....								
71.....	1 0	4 0						2
72.....						2 0		
73.....		1 0						
74.....		3 0						
75.....				1 8				
76.....		2 0		1 4				
77.....		8	1 0		2 0	1 0		
78.....		10				10		3
79.....	1 0	8						
80.....				3				
81.....				2 5			2	
82.....		2 0				8		
83.....			1 0	1 0				
84.....	1 0	3 0						
85.....					1 9	1 6		
86.....				4 0				
87.....					4 0			
88.....		4 0				6	6	
89.....	1 0	1 0				2 5	6	
90.....			1 5			3 5	5	
91.....					4 0		1 0	
92.....				2 0	1 0	1 4		
93.....						1 10		1 6
94.....		2 0			3 0			
95.....		3 0	4				6	
96.....		3 0					2 1	
97.....	3					5	1	3
98.....		3 5		4		5		
99.....	1 0				2 0	6		
100.....	3 0	2 7						
101.....	1 0				3 0	6	3	

Candidates for admission to the United States Military Academy, showing time employed in private study during the five years previous to reporting at the Academy, and entire time of attendance at school, college, &c., and time employed as teacher.

CANDIDATES ADMITTED, 1884.

[Data given by candidates upon reporting.]

1884.	Time of attendance at school.						Time employed in private study.	Time employed as teacher.
	Public.		Private.		Normal school or academy.	University or college.		
	Common.	High.	Common.	High.				
	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	
1		3 0				3 0	3 0	
2	3 0	3 3		1 0	2 0	1 0		
3	8 0	4 0					5	
4	5 0			4 0			10	
5	2 0	2 0	3 0	2 0		1 6	9	
6	8 0	6					3	
7	1 0	2 0	2 0				4	
8	6 0	1 0		1 0		1 0	(*)	
9			7 0		2 0		3	
10	6 0	1 0					6	
11	10 0				2		4	
12	3 6				2 0		3 0	
13				2 0		2 0	1 6	
14	5 0	1 6		3		9		
15	6 0	3 0		6			7	
16	10 0					9	2 0	

*At intervals

Candidates for admission to the United States Military Academy, &c.—Continued.

CANDIDATES ADMITTED, 1884—Continued.

1884.	Time of attendance at school.						Time employed in private study.	Time employed as teacher.
	Public.		Private.		Normal school or academy.	University or college.		
	Common.	High.	Common.	High.				
17.....	3 0		1 6		3 0		2	
18.....				14 0				
19.....	7 0	4 0					4	
20.....	6 0			5		1 3	6	
21.....	6 0	2 0	1 0					
22.....				3 0	1 6		1 0	
23.....	5 0				5		3	5
24.....	7 0	8 0	1 6			1 1		
25.....	6 0	3 0	1 6			3 0	1	
26.....	5 0	3 0					3	
27.....			2 0		2 0	1 0	1 0	
28.....	1 6			7			6	
29.....	5 0	3 0					1	4
30.....	4 0	3 6	3 0					
31.....	4 0	4 0			3			
32.....	1 0		2 0	5 0			1 0	
33.....	8 0							
34.....			7 0	3 0			4	
35.....	2 6			4 0		4 0		
36.....				5 0		4 6	2	
37.....	2 0	4 0						
38.....	4 0		3 0	4 0			5	
39.....	4 6	1 6	1 6			3 0		
40.....	6 0	2 6	4 0					
41.....	11 0							
42.....	3 0	1 0	2 0			1 6	3	6
43.....	3 0	4 0				4 0		
44.....	6 0	4 0				3 0		
45.....	8 0	3 0			1 0		2 0	4
46.....	5 0	6 0	3 0				6	
47.....	9 0	4 0					(*)	9
48.....	6 0	2 0	2 0				6	
49.....	5 0				3	2 0	4	
50.....	8 0	3 0	1 0			1 0		
51.....	11 0					3 0	2 0	3
52.....	6 0	1 0	1 0				5 0	
53.....	8 0					2 6		
54.....	7 0				4 0	2 0		
55.....	8 0	3 0					6	
56.....			1 0	4 0		3 0	8	
57.....	6 0	3 0				2		
58.....	10 0				2 0		1 0	
59.....	11 0	2 0						
60.....	5 0	4 0				1 6	4 6	6
61.....	2 6			5 0		3 0	5	
62.....	1 0				4 0		6 3	
63.....	5 0		2 0		2 0		2 1	8
64.....	1 0							
65.....	10 0	2 0					1 2	3
66.....	6 0	4 0				1 8	6 5	
67.....		9 0						
68.....	6 0							
69.....	7 0	4 0						
70.....	11 0	4 0						
71.....	9 0	1 0						
72.....	2 0		1 0			9	1 3	7
73.....	8 0	3 0		7 0				
74.....			4 0	1 0	8		3	
75.....				3 0		5 0		
76.....	3 0	3 0				2 0		
77.....	5 6					2 0	4 0	6
78.....	8 8		2 0				3	
79.....	5 0			2 0			11	
80.....	5 0				3 0	3 0		
81.....	5 0						2	1 0
82.....	6 0	1 0			2			6 1
83.....	2 0	1 0	2 0				2 6	3
84.....	7 0						1 1	7
85.....	4 0	1 0						
86.....	7 0	4 0					1 0	
87.....	3 3		4 0	4 6			11	
88.....	9 0					2 4	2	

* At intervals.

Candidates for admission to the United States Military Academy, &c.—Continued.

CANDIDATES ADMITTED, 1884—Continued.

1884.	Time of attendance at school.						Time employed in private study.	Time employed as teacher.
	Public.		Private.		Normal school or academy.	University or college.		
	Common.	High.	Common.	High.				
	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.
89	6 0	2 0				1 0	3 0	
90	6 0	2 0				1 6		
91	8 0				6		3	
92			7 0		2	2 0		
93	8 0				5			
94	4 0	2 0				2 0		
95			1 6		3 6			
96		12 0						
97	5 0	2 0	1 0			3 0	3	
98	6	4 0				3 0		

CANDIDATES ADMITTED, 1885.

1	8 0	*4					2	
2	5 0		5 0		3 0			
3	8 0	1 0				1 0	6	1 0
4	2 0	2 0	4 0			3 0	2	2
5	2 0	2 0	5 0				2 0	0
6	6 0	3 0					1	2
7	7 0				2 0	3 6	2	
8	11 0	1 6					(†)	
9	6 0	2 0					2	3
10	2 0	6 0						9
11	2 0	2 0	1 0			1 0	1 6	
12	6 0	4 0			3			
13	2 0	3 0		1½			1½	6
14	5 0	2 0						
15			2 0	4 0			2 0	
16				2 0	1 4			
17	6 0	1 0		1 0				
18	3 0	3 0	4 0				3	
19	3 0		4 0			2 0	2	
20	8 0	2 0				3	3	
21	10 0	3 0					2	
22	6 0	1 0				3 0	3	
23	7 0	2 0		4 0				
24	12 0	2 0					1	2
25	2 0	9	3 0			9	5	
26	2 0		8 0				3	
27	6 6				1 0	3 0	3	2 1
28	4 0		2 0		1 0	1 6	2	1½
29	6 0					1 0	2	5
30				9 0			3	
31			5 0	1 2	1 6		3	
32	8 0		6	4	7½		2	4
33	6 0	4 0				5	9	
34	2 0	3 6	2 6				6	
35	6 0	1 0					4	
36	9 0	3 0	3 0					
37			1 1			10	1	
38			3 0	7 0			2	0
39			3 6	2 6	2 0		0	6
40				8 0			2	
41	3 6	2 0					6	
42	8 0					2 0	1	6
43	11 0						3	
44	(c)	6			6			5
45	5 0	1 0			2		1 0	6
46	4 0	4 0						
47	9 0	1 6						
48			5 0	4 0				
49	5 0	1 0	2 0			2 6	4	
50		(§)	(§)				2	
51	8 0		0					
52	1 0	2 6	3 0				4	
53					12 6		6	
54			4 0		1 0		7	7

* Evening.

At intervals.

‡ During winter.

§ Studied with governess.

Candidates for admission to the United States Military Academy, &c.—Continued.

CANDIDATES ADMITTED, 1885—Continued.

1885.	Time of attendance at school.						Time employed in private study.	Time employed as teacher.
	Public.		Private.		Normal school or academy.	University or college.		
	Common.	High.	Common.	High.				
	<i>Yrs. Mos.</i>	<i>Yrs. Mos.</i>	<i>Yrs. Mos.</i>	<i>Yrs. Mos.</i>	<i>Yrs. Mos.</i>	<i>Yrs. Mos.</i>	<i>Yrs. Mos.</i>	<i>Yrs. Mos.</i>
55.	6 0	2 3	4 0					
56.	7 0				3 0			
57.	5 0	4 0	(*)			1 0	7 3	
58.	6 0		4			1 2	6	
59.	3 0					1 0	2 0	
60.	7 0						1	
61.			3 0	3 0	3 0		6	
62.	5 0		9 0				2 0	1
63.			10 0				2 0	
64.	8 0	3 0				2 0	1 0	
65.	7 0	3 0		2 1			4	4
66.						5 6	6	
67.	6		10 0		6		1 0	
68.			3 0	5 0		4 0	3	
69.	12 0					4	3	
70.	7 0	1 6	2 1					
71.	2 0	4 0					2 0	1 0
72.	5 0	6				2 3	5	10
73.	7						1 6	
74.	2 0	1 0	2 0				5	
75.	3 0		2 0		1 0			
76.	11 0	3 0					(†)	
77.	8 0						2	
78.	8 0	2 0					3 4	4 0
79.	9 0	3 0						
80.		2 0	3 0	2 0	1 0	2 0	2 0	
81.	7 0	1 0					4 0	
82.	8 0					6	6	
83.	7 0	2 0					1 0	
84.	7 0	3 0		3	6		1 6	
85.			9 0			5 0	1	
86.		(†)	(†)	(†)	3 0	3 0		
87.	10 0					6	2 0	2 3
88.	6 0						3	
89.	4 6			5 6				
90.	8 0				2			
91.	3 0	1 0	4 0		1 0		2 3	1 0
92.	6			5 0		7	9	3 4
93.	9 0				3 0		11	8
94.	8 0	1 0					2	
95.	3 0	2 0			9		1 3	

*Unknown.

† At intervals.

CANDIDATES ADMITTED, 1886.

1.	7 0	4 0					1	
2.	7 0	2 0				1 0	1 0	1 0
3.	6 0	5 0					1	
4.	6 0				1 0	1 0	4	
5.	2 0		3 6			3 0	3 1	
6.	8 0	3 0			2 0	5 0		1 10
7.			5 0					
8.	1 9		4 0				1 0	
9.	7 0	3 0						1 1
10.	1 6			4 0	1 0	2 0		
11.	5 0			1 6		2 6		1 1
12.	5 0	2 0				3 0		3
13.			6 0			2 0		3
14.	8 0	3 0	1 0					3
15.	4 0		1 0		3 0			1 1
16.	8 6	1 6				3 0		
17.	5 0	3 6	1 0					10
18.	2 0		1 0	4 0			5	5
19.	5 0				5 0			*8
20.	9 0	3 0						6
21.	8 0					2 0		3
22.	8 4	2 0	8		9			
23.	9 0	4 0						1 1

* Two hours a day.

Candidates for admission to the United States Military Academy, &c.—Continued.

CANDIDATES ADMITTED, 1886—Continued.

1886.	Time of attendance at school.						Time employed in private study.	Time employed as teacher.
	Public.		Private.		Normal school or academy.	University or college.		
	Common.	High.	Common.	High.				
	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.
24.	11 0							
25.	7 0				4 0		1 0	1
26.	4			2			1 0	
27.	6 0					1 0	2	3
28.	12 0	2 0					1 7	
29.	10 0	8			4		6	
30.		1	2 0	1 0	2 0			
31.	3 0				3 0	3 0	1	
32.	5 6						5	
33.	12 0						1	
34.	7 0	3 0		4			4	
35.	7 6	1			1		4	6
36.	10 6				8		2	
37.	9 9			2	10			
38.	6 0				2		2	
39.			11 0			1 6		
40.			6 0		7		4	
41.			6 0					
42.	9 0							
43.	9 0		6				1 0	
44.	6 0	3 0				1 0		
45.	9 0	1 0					3	2 0
46.	3 0	2 6	2 0				3	
47.	8 0	5 0					2 0	1
48.	8 0	3 0	2 0				4	
49.	8 0	3 0					2	2 0
50.	5 10	3 9					2 0	
51.	6 0	1 0	2				*1 0	
52.	7 0				3 3	1 6		
53.	1 6	6	3 0	2 0		1 0	5	2
54.	6 0	4 0						11
55.	18 0	10						
56.	1 8	(†)	(†)	(†)			(*)	
57.	4 0	1 10					*5 0	6
58.	4 2	4			4		*4 0	1
59.	5 0	4 0					1 8	1 11
60.	8 0							
61.			5 0	1 0	5		2	1 9
62.	7 0				1 0		3 5	
63.	5 0					4 0		
64.	8 0						6	5
65.	9 0			2				3
66.	11 0		6 0		6	4		5
67.	8 0	3 0		6			1 0	
68.	7 6					2 0	2	
69.	6 0				3 0		1	3 0
70.	(§)		2 0	4 6		2 0	1	
71.	6 0		1 1					10
72.	8 0	4 0		9			1 0	
73.	6 0	3 6	1 0		3	1 6		
74.			6 0	4 0		6	3	
75.	8 0					6	1 0	5
76.	1 6		2 0			4 0	3	1
77.	6 0	4 0						
78.	1 1				4	6 0	5	
79.	12 0						1	
80.			2 0		7 0		1	
81.	6 0	4 0					5	
82.	7 0		1 1			1 5	4	
83.	8 0	3 10					1 0	1
84.			4 0	6		8	6	
85.	11 3	3 0			4		2	6
86.	1 0		5		3 0		3	
87.	5 0	1 0	3	4			8	
88.	1 0	2 0	6 0				3	
89.	2 0	(†)		2 3			3	
90.	6 0	4 0						
91.	9 0	4 0						
92.	4 0					3 6	3	
93.	3 0	2 6					6	

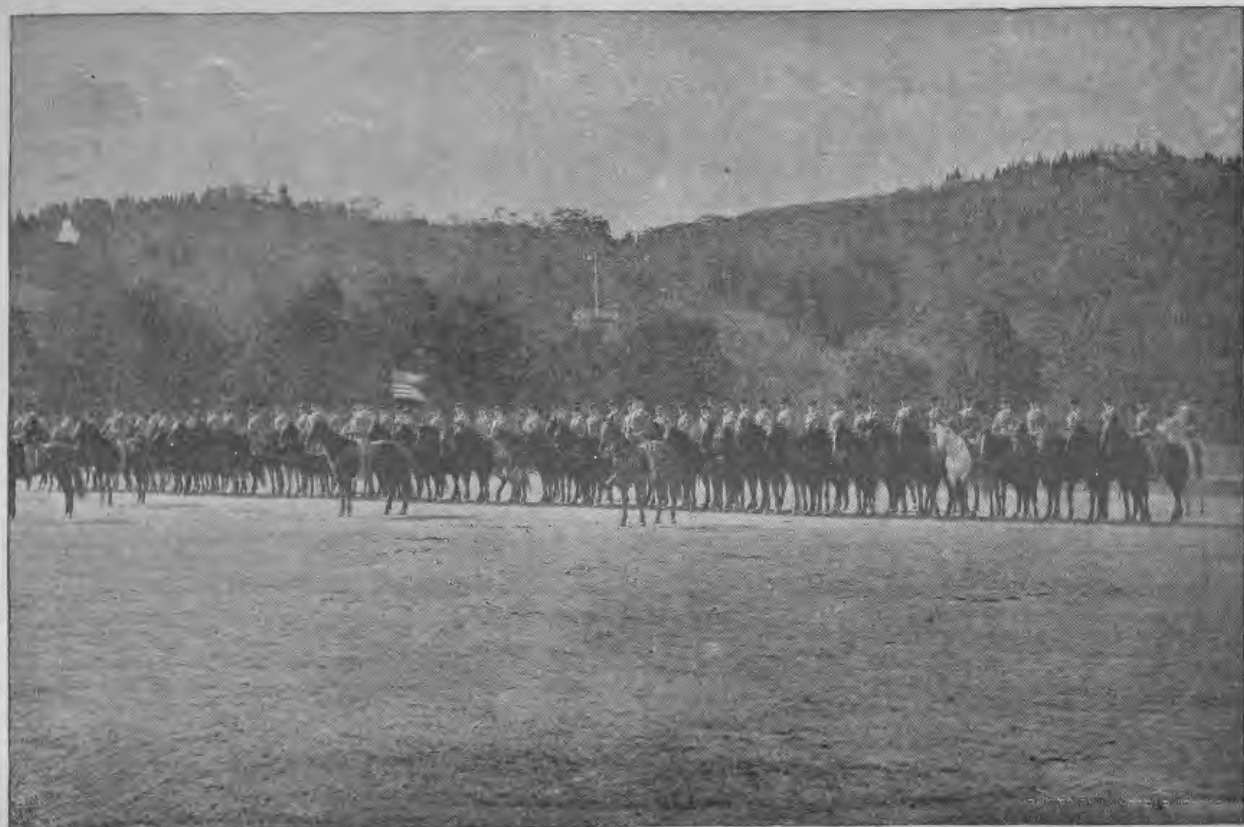
* At intervals.

† Six months in each.

‡ Studied at home.

|| During winter.

§ Five months in each.



CADETS AT CAVANLEY

Candidates for admission to the United States Military Academy, &c.—Continued.

CANDIDATES ADMITTED, 1886—Continued.

1886.	Time of attendance at school.						Time employed in private study.	Time employed as teacher.
	Public.		Private.		Normal school or academy.	University or college.		
	Common.	High.	Common.	High.				
	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.	Yrs. Mos.
94	9 0	1 0	2½					
95	5 0	4 0			1		1 8	
96	9 0	3 0						
97	2 6				1 0		6	6
98	6 0	4 0					1 0	6
99			5 0		3 0	1	3	
100	7 0	3 0					3	
101			5 0				3 0	
102			9 0		1 0		4	
103			2 0	4 0	4 0	1 0	1	
104	10 0	1 0	1 0			1 0	1 0	1
105	7 0	3 0						
106	4 0	1 0			3 0		(*)	
107	10 0				3 0		1 0	1 0
108	4 0					9	4 0	5
109	8 0	2 0				1 0	4 0	
110	7 0	4 0					1 0	
111	7 0	3 0						
112			5 0			6	8	
113		3 0	2 0			2 0	4 4	
114	7 0	4 0					2	
115	7 0					3 0		
116	6 0	4 0			1½		3 0	
117	4 0	5 0	3				3	
118	5 0	2 0				3 0	6	
119			4 0	9½	3 0			
120	6 0	2 0					3	
121	5 0	4 0					1	
122	6 0	1 8				6		
123	6 0	1 2			3	1 0	5	
124	12 0	4 0					3	
125	10 0	1 0		1 0			7	
126	6 0	4 0			4		(†)	2
127		3 0	3 0				5	
128	3 6			4 0	3		5	

* Ten days.

† At intervals.

‡ Six months in each.

It appears from this list that a very large number of candidates have taught school. In one class there were 27 cadets who had been school teachers. It is open to discussion whether the methods at present pursued in the preliminary examination of the candidates for admission is always calculated to obtain for the institution that strong natural ability which may be found in those applying for admission, and perhaps rejected for lack of previous acquirement. What a youth may have been taught is one thing. What he is capable of being taught is another; and this cannot always be ascertained by a series of categorical questions and answers. The natural aptitude shown by the candidate should be a prominent element considered in his examination, and this can only be ascertained by the board of examiners having him before them in person instead of judging him entirely by his written answers to set questions.

In looking back upon the history of the Academy from the time of its foundation to the present period, it is found that, notwithstanding the purely technical education that is acquired here for a special purpose, the graduates of the Academy are to be found in every walk and calling of life. The total number to date is 3,173.

Serving, as a rule, in the Army a sufficient length of time to return to the Government all that it demands for the education received, very

many of them have sought and found those positions in civil life which their training and education qualified them to fill, until nearly every grade of industry has ranked them among its numbers. Many have been distinguished in high public positions, as governors of States, Senators and Representatives in the National Legislature, bishops, priests, judges, engineers, lawyers, physicians, professors in colleges, presidents of universities, and diplomatists, not omitting the highest office in the land—a President of the United States. The following list, taken from Cullum's Register, exhibits these facts in detail :

Civil occupations of graduates of the United States Military Academy.

Occupation.	Num-ber.	Occupation.	Num-ber.
President of the United States	1	Professors and teachers	119
Members of the Cabinet of the United States	4	Superintendent of Coast Survey	1
Ministers from the United States to foreign courts	7	Surveyors-general of States and Territories	6
Chargé d'affaires from the United States to foreign courts	2	Chief engineers of States	14
United States consuls-general and consuls	7	Presidents of railroads and other corporations	58
Members of the United States Senate and House of Representatives	16	Chief engineers of railroads and other public works	56
United States civil officers of various kinds	99	Superintendents of railroads and other public works	59
Presidential electors	6	Treasurers of railroads and other corporations	12
Governors of States and Territories	8	Civil engineers	187
Lieutenant-governors of States	2	Judges	12
Members of State legislature	72	Attorneys and counsellors-at-law	1
Presiding officers of States' senate and house of representatives	8	Bishops	1
Members of conventions to form State constitutions	13	Clergymen	18
State officers of various grades	51	Physicians	12
Adjutant and quartermasters general of States and Territories	14	Merchants	101
Officers of State militia	129	Manufacturers	46
Mayors of cities	10	Artists	3
City officers	34	Architects	7
Presidents of universities, colleges, &c.	35	Farmers and planters	202
Principals of academies and schools	27	Bankers	16
Regents and chancellors of educational institutions	11	Bank presidents	7
		Bank officers	21
		Editors	25
		Authors	91

The remarkable fact is here presented that the Academy has contributed to the educational force of the country no less than 35 presidents of universities or colleges, 27 principals of academies and schools, 11 regents and chancellors of educational institutions, and 119 professors and teachers, making a total of 192 instructors of youth distributed throughout the country; showing that by an apparent method of natural selection the institution may be regarded in one sense as a national normal school, giving to the people at large all the benefits of its higher education and superior training.

All those graduates who have returned to civil life have shown a readiness, whatever their occupation, to respond with patriotic zeal to the call of their country in time of need, willingly forsaking lives of comparative ease to endure again the hardships of the military service. In this manner the Academy has scattered broadcast its remarkable system of education and its superb training, giving to the country the services of its graduates, no less valuable, perhaps, in time of peace than they are in time of war.

The Board of Visitors, finding much to approve and little to criticise in the present administration of the Academy, commend the institution to the continued fostering care of Congress, believing that its expense is small compared with its results, and that the country receives back

many times its cost in the valuable services of a body of men distinguished for intellectual ability, strong conservatism, a keen sense of honor, and an unimpeachable personal integrity.

All of which is respectfully submitted.

KEMP P. BATTLE.
WILSON S. BISSEL.
WILLIAM H. BLAIR.
GEORGE P. COSBY.
W. G. SUMNER.
FRANCIS T. NICHOLS.
THOMAS C. MCCORVEY.
CHARLES F. MANDERSON.
RANDALL L. GIBSON.
JAMES LAIRD.
EGBERT L. VIELE.

DECEMBER 22, 1886.

I concur in all the suggestions and recommendations contained in this report, except that giving an increased number of appointments.

EDWARD S. BRAGG.

APPENDIX A.

*Inspection of the accounts of Capt. William F. Spurgin, Twenty-first Infantry, treasurer
United States Military Academy, May 29, 1886.*

I.—Assistant treasurer.

Mar. 25, 1886. Balance to debit	\$40, 128 06
Deposited (through paymaster)	24, 333 00
	<hr/>
Amount credited (checks drawn)	64, 461 06
	<hr/>
May 29. Balance to debit	45, 740 17
	<hr/> <hr/>

II.—Balances paid.

Mar. 25, 1886. Balance to debit	50 98
Amount received	183 93
	<hr/>
Amount disbursed	132 95
	<hr/>
Balance to debit	161 49
	<hr/>
	28 54
	<hr/> <hr/>

III.—Barber and shoeblack.

Amount received	481 95
	<hr/>
Amount disbursed	481 95
	<hr/>
Balance to credit	478 75
	<hr/>
	3 20
	<hr/> <hr/>

IV.—Cadet laundry.

Mar. 25, 1886. Balance to credit	3, 817 68
Amount received	1, 325 32
	<hr/>
Amount disbursed	5, 103 00
	<hr/>
Balance to credit	1, 163 44
	<hr/>
	3, 979 56
	<hr/> <hr/>

V.—Cadet quartermaster's department.

Mar. 25, 1886. Balance to credit	7, 623 32
Amount received	6, 686 60
	<hr/>
Amount disbursed	14, 309 92
	<hr/>
Balance to credit	9, 270 33
	<hr/>
	5, 038 99
	<hr/> <hr/>

VI.—*Cadet subsistence department.*

Mar. 25, 1886. Balance to credit.....	\$2,372 44
Amount received.....	9,603 81
	<hr/>
Amount disbursed	11,976 25
	<hr/>
Balance to credit.....	1,977 93
	<hr/> <hr/>

VII.—*Cadet cash.*

Amount received.....	288 00
	<hr/>
Amount disbursed	288 00
	<hr/>
	288 00
	<hr/> <hr/>

VIII.—*Confectioner.*

Amount received.....	68 50
	<hr/>
Amount disbursed.....	68 50
	<hr/>
	68 50
	<hr/> <hr/>

IX.—*Corps of cadets.*

Mar. 25, 1886. Balance to credit.....	15,423 38
Amount received.....	25,160 25
	<hr/>
Amount disbursed.....	40,583 63
	<hr/>
Balance to credit.....	20,568 78
	<hr/>
	20,014 85
	<hr/> <hr/>

XII.—*Dentist.*

Amount received.....	135 00
	<hr/>
Amount disbursed	135 00
	<hr/>
	135 00
	<hr/> <hr/>

XIII.—*Deposits.*

Mar. 25, 1886. Amount received.....	1,187 25
	<hr/>
Amount disbursed.....	1,187 25
	<hr/>
	725 25
	<hr/>
Balance to credit.....	462 00
	<hr/> <hr/>

XIV.—*Dialectic society.*

Mar. 25, 1886. Balance to credit.....	11 25
	<hr/>
	11 25
	<hr/>
Balance to credit.....	11 25
	<hr/> <hr/>

XV.—*Equipment fund.*

Mar. 25, 1886. Balance to credit	29,788 00
Amount received.....	2,050 00
	<hr/>
	31,838 00
	<hr/>
Balance to credit.....	31,838 00
	<hr/> <hr/>

XVI.—*Expressage.*

Mar. 25, 1886. Amount received	\$1 45
	<hr/>
Amount disbursed	1 45
	<hr/>
Balance to debit	25
	<hr/>

XVII.—*Gas fund.*

Mar. 25, 1886. Balance to credit	565 66
Amount received	664 45
	<hr/>
Amount disbursed	1,230 11
	<hr/>
Balance to credit	468 90
	<hr/>
	<hr/>
	761 21
	<hr/>

XVIII.—*Hops and Germans.*

Amount received	224 00
	<hr/>
	224 00
Amount disbursed	40
	<hr/>
Balance to credit	223 60
	<hr/>

XIX.—*Miscellaneous fund.*

Mar. 25, 1886. Balance to credit	1,012 71
Amount received	95
	<hr/>
	1,013 66
Amount disbursed	7 61
	<hr/>
Balance to credit	1,006 05
	<hr/>

XX.—*Miscellaneous items.*

Mar. 25, 1886. Balance to credit	450 30
Amount received	444 65
	<hr/>
	894 95
Amount disbursed	442 90
	<hr/>
Balance to credit	452 05
	<hr/>

XXII.—*Observatory fund.*

Mar. 25, 1886. Balance to credit	404 49
Amount disbursed	114 10
	<hr/>
Balance to credit	290 39
	<hr/>

XXIII.—*Paymaster.*

Amount charged to paymaster	24,333 00
Amount received from paymaster	24,333 00

XXIV.—*Periodicals.*

Amount received	26 00
Amount disbursed	26 00

XXV.—*Photographs.*

Amount received	20 35
Balance to credit	20 35

XXVI.—Policing barracks.

Mar. 25, 1886.	Amount received.....	\$523 95
	Amount disbursed.....	523 95

XXVII.—Postage.

Amount received.....	74
Amount disbursed.....	74

XXVIII.—Post fund.

Balance to credit.....	1,108 48
Amount received.....	603 52
	<hr/>
	1,712 00
Amount disbursed.....	452 61
	<hr/>
Balance to credit.....	1,259 39

XXIX.—Trust funds.

Amount on hand	20,000 00
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XXX.—Cash.

Cash on hand	1,569 86
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DR.

RECAPITULATION.

CR.

Assistant treasurer	\$45,740 17	Barber and shoeblack	\$3 20
Balances paid	28 54	Cadet laundry	3,979 56
Expressage	25	Cadet quartermaster department	5,038 99
Trust funds	20,000 00	Cadet subsistence department	1,977 93
Cash	1,569 86	Corps of cadets	20,014 85
		Deposits	462 00
		Dialectic Society	11 25
		Equipment fund	31,838 00
		Gas fund	761 21
		Hops and Germans	223 60
		Miscellaneous fund	1,006 05
		Miscellaneous items	452 05
		Observatory fund	290 39
		Photographs	20 35
		Post fund	1,259 39
Total	67,338 82	Total	67,338 82

I have seen the trust funds, counted the cash, examined the vouchers and statement of the assistant treasurer, New York, and list of outstanding checks. I find the above statement to be the condition of the funds, on hand, in trust, and with the assistant treasurer, May 29, 1886.

J. A. AUGUR,

Captain, Fifth Cavalry, Inspector.

A true copy.

W. C. BROWN,

First Lieutenant, First Cavalry,
Adjutant Military Academy.

APPENDIX B.

Report of Committee of the Board of Visitors to the United States Military Academy at West Point, charged with investigation and report concerning public buildings and grounds.

After the organization of the Board of Visitors to the United States Military Academy, on June 3, 1886, among other committees appointed was one of three members "on buildings, grounds, and other concerns of the Military Academy not provided for in the other committees."

Mr. Manderson, Mr. Cosby, and Mr. Bissell were appointed by the president of the Board to act as such committee.

A communication was thereupon addressed to the Superintendent of the Academy, of which the following is a copy:

ROOMS OF THE BOARD OF VISITORS, WEST POINT, N. Y.,
June 4, 1886.

General WESLEY MERRITT,
Superintendent West Point Military Academy:

MY DEAR GENERAL: One of the committees of the Board of Visitors is "on buildings, grounds, and other concerns of the Military Academy not provided for in the other committees," and is composed of General Cosby, Mr. Bissell, and myself. I should be much pleased if you would furnish me, at your earliest convenience, with such detailed information as may aid the committee in its investigation.

It would like a statement and general description of the buildings of the Academy, showing the purposes for which they are used, and what changes or improvements are by you deemed advisable. Also, a statement of what improvements are required to better the grounds of the military reservation.

The committee would be pleased to accompany you, or some officer designated by you for the purpose, through the public buildings and about the grounds at any time after the receipt of the information herein requested that may suit your convenience.

Very respectfully, yours,

CHAS. F. MANDERSON,
Chairman Committee on Buildings and Grounds, &c.

In response to this letter, the following was received from General Wesley Merritt, superintendent:

OFFICE OF THE SUPERINTENDENT UNITED STATES MILITARY ACADEMY,
West Point, N. Y., June 5, 1886.

Hon. CHARLES F. MANDERSON,
*Chairman of Committee on Buildings and Grounds of the
Board of Visitors to the United States Military Academy:*

MY DEAR MR. SENATOR: In accordance with your request I inclose a list of the public buildings at this post and a statement of the uses to which they are put:

1. Cadet hospital.
2. Cadet mess-hall.
3. Academic building and gymnasium.
4. Cadet barracks.
5. Commandant's office, cadet guard, and fire-engine house.
6. Steam-heating plant.
7. Cadet water-closets.
8. Coal-house.

9. Storehouse and workshops of cadet quartermaster.
10. Riding hall.
11. Stable for cavalry and artillery horses.
12. Executive building.
13. Chapel.
14. Library.
15. Ordnance laboratory.
16. Gas and gas-coal-house.
17. Shops and sheds (4) quartermaster's department.
18. Store-house, quartermaster's department.
19. Granary.
20. Stable, Quartermaster's Department.
21. Barracks cavalry detachment.
22. Barracks artillery detachment.
23. Chapel for enlisted men and their families.
24. Coal-house for quartermaster's department.
25. Band barracks.
26. Hospital for enlisted men.
27. Barracks engineer company.
28. Equipment and commissary store-houses.
29. Cadet laundry.
30. School-house for enlisted men and children.
31. Observatory.

QUARTERS.

Thirty-three sets quarters, occupied by thirty-seven professors and officers.

Six sets quarters in old cadet hospital, occupied by nine officers.

Twelve officers occupy quarters in cadet mess-hall building, cadet and engineer company barracks.

MISCELLANEOUS BUILDINGS.

1. Confectionery and market shop.
2. Stable public carrier.
3. Quarters occupied by Messrs. Butler, McEnamy, & Erwin.
4. Cottage occupied by Mr. Koehler.

5. Quarters occupied by Mr. Wood and Mr. Denton.

In these the following changes are by me deemed desirable and necessary, and are named in the order of their importance:

1. Work-shops for the quartermaster's department, to be erected at a cost of \$11,500.
2. Gymnasium for instruction of cadets, \$30,000.
3. Changes in present academic building, to include raising it one story, making it fire-proof, and converting basement for use of department of instruction, \$75,000.
4. Changes in library building for an increased accommodation of books, \$5,000.

The above includes the pressing needs of the Academy, to which should be added sixteen sets of quarters for enlisted men connected with the Academy, to cost not to exceed \$14,000.

There are no necessities connected with the improvement of the public grounds of the reservation which cannot be met by the usual yearly appropriations made by Congress and by the labor of the troops.

I will be glad to accompany your committee on an inspection, with a view to the correct understanding of the above and kindred matters, on Monday, June 7, at 10 a. m., or on any other day at such hour as may be convenient to your committee.

Very respectfully, your obedient servant,

W. MERRITT,

Colonel Fifth Cavalry, Brevet Major-General, U. S. A., Superintendent.

The committee were afforded every facility for thorough examination of the buildings described above, and also carefully investigated as to the care and condition of the public land, the means afforded to supply water, heat, and light, the sewerage, and the maintenance and repair of roads.

The reservation contains about 2,200 acres of land. Its beautiful situation, diversified surface, adaptability for perfect drainage, convenience of approach are all admirably supplemented by the intelligent administration that has advantaged itself of every opportunity.

The most rigid and scrupulous care is and has been exercised over the grounds and buildings. The roads and paths are located to join convenience to beauty, and are in admirable repair. The surface drainage and underground sewerage are excellent in design and well guarded in the interest of health and cleanliness. The committee, on July 7, 1886, addressed a letter to the Superintendent, of which the following is a copy:

WASHINGTON, D. C., July 7, 1886.

General WESLEY MERRITT, U. S. A.,

West Point, N. Y.:

MY DEAR GENERAL: My attention has been called to the following statement, contained in a "Directory of the Gas-Light Companies of the United States," 1886:

"652. West Point Gas-Works (belongs to United States Government; superintendent, J. E. Richards): Price of gas per 1,000 feet, 75 cents; number public gas-lamps, 27; approximate annual output, 11,000,000 feet; process of manufacture, coal."

This statement has provoked some comment in the investigation of the supply of gas, cost, &c., at Washington.

I deem it well, in the interest of the Military Academy, that in the report of the Board of Visitors there should be full showing as to the supply of both gas and water. Will you at your convenience cause this to be mailed to me?

As to gas, it should show length and character of mains and pipes; kind and capacity of works; power of gas and amount supplied; amount of coal and other material consumed and its cost; cost of care of works and distribution; estimated cost of the gas supplied; number of lamps, buildings supplied, &c.; how work is directed; what improvements are needed in interest of good service and economy, &c.

Very truly, yours,

CHARLES F. MANDERSON.

To this the following answer was obtained:

OFFICE OF THE SUPERINTENDENT U. S. MILITARY ACADEMY,
West Point, N. Y., July 19, 1886.

Senator CHARLES F. MANDERSON,

Washington, D. C.:

MY DEAR SENATOR: A temporary absence from West Point has delayed the answer to your favor of the 7th instant.

I inclose memoranda as to gas and water supply at West Point.

There has never been, to my knowledge, any charge for water to officers.

The charge for gas has varied according to the state of the fund, and approximately with the cost of manufacture, though, as stated in the memorandum, there are no appliances for determining its exact cost from year to year.

There is no authority for the publication you extract from, a "Directory of the Gas-Light Companies of the United States" for 1886.

Hoping that the information inclosed covers generally the ground of your inquiry,

I am, very truly yours,

W. MERRITT,

Colonel Fifth Cavalry, Brevet Major-General U. S. Army, Superintendent.

MEMORANDA.

GAS-WORKS.

	Feet.
Six-inch cast-iron pipe, main.....	1,981
Four-inch cast-iron pipe, main.....	3,826
Three-inch cast-iron pipe, main.....	1,680

Kind of works: Coal-gas.

Capacity of works: 20,000 cubic feet of gas per day.

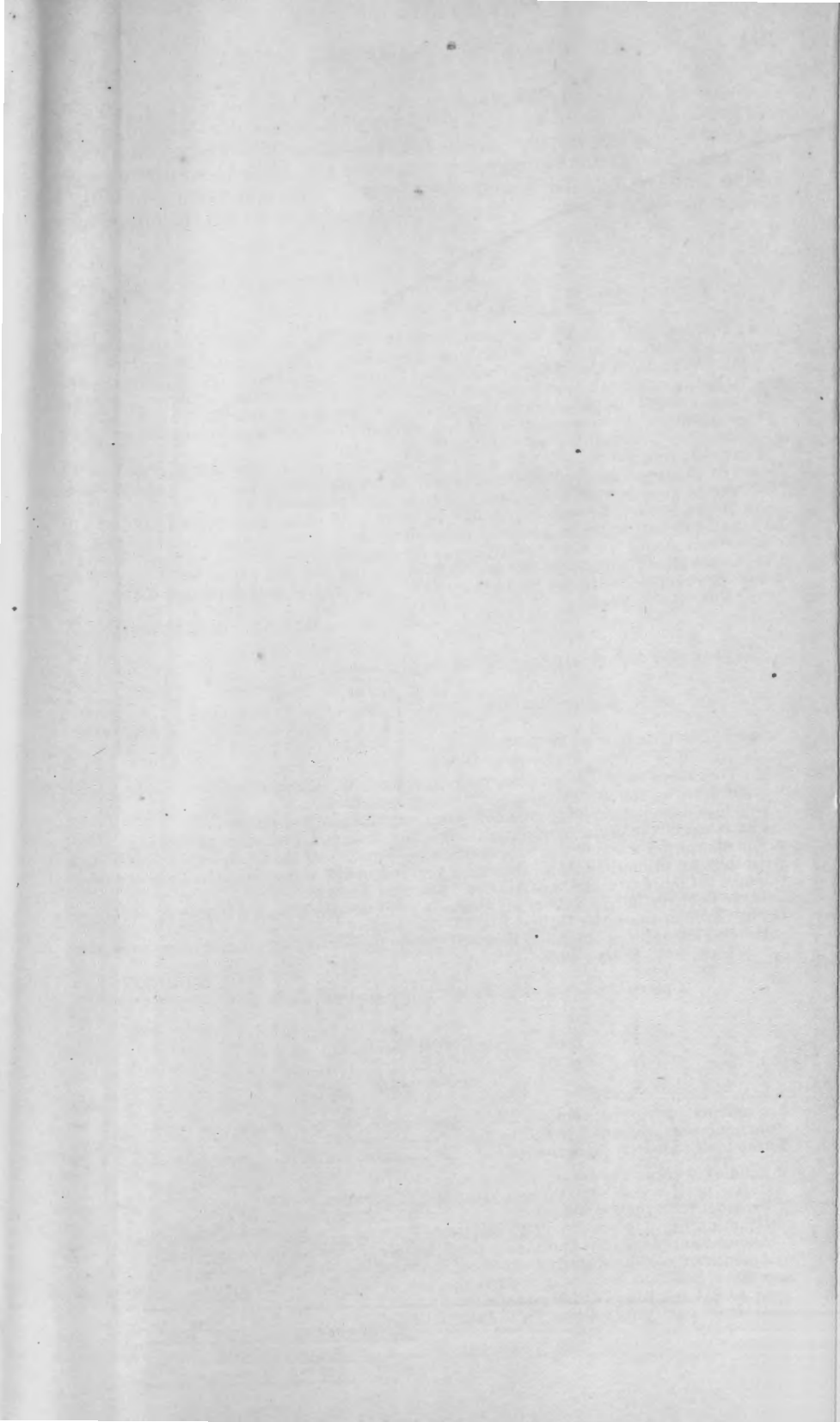
Pressure: 2.5 inches.

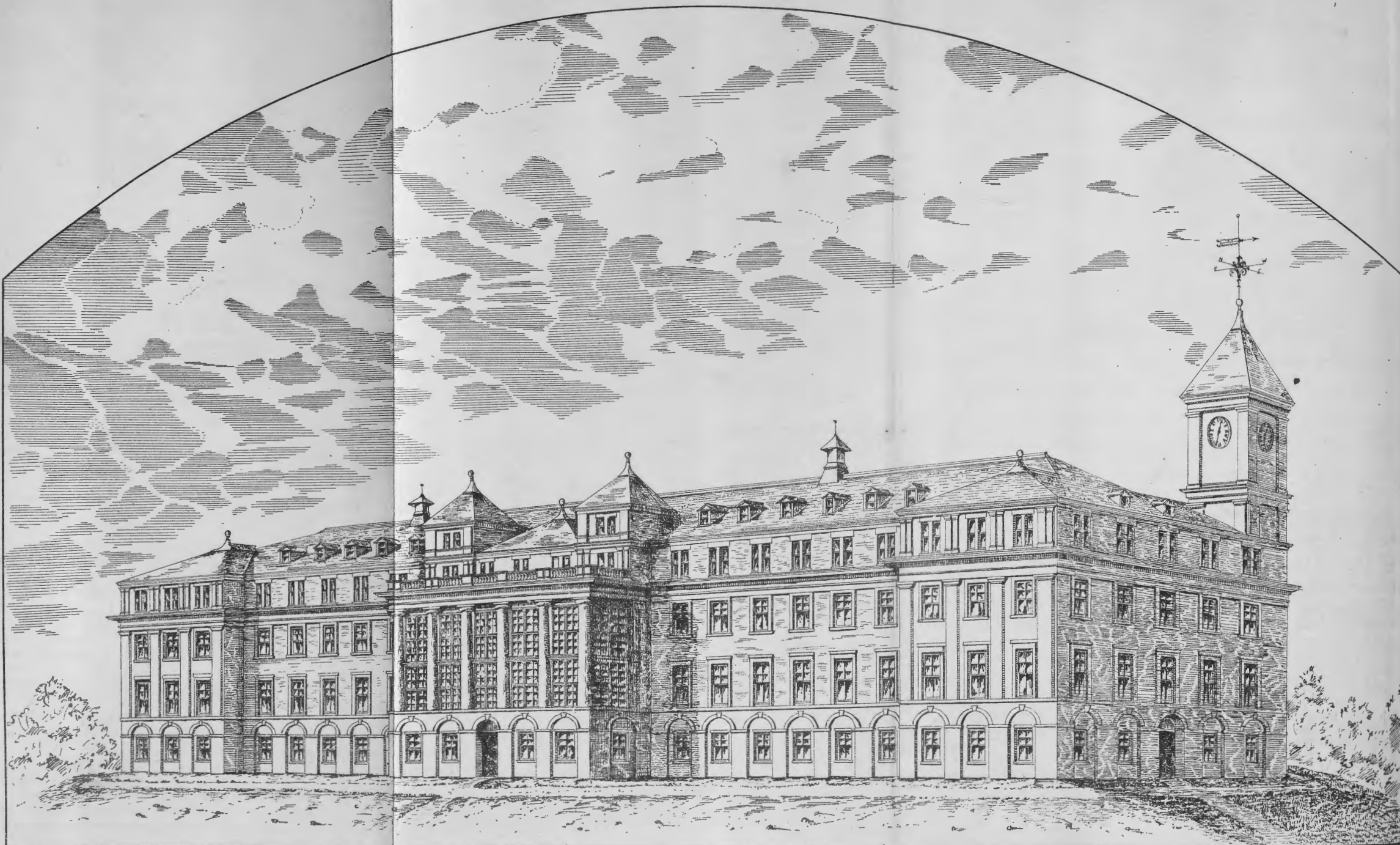
Illuminating power: About 17 candles.

Amount supplied: No appliances for determining the amount supplied.

Amount of coal used during the fiscal year ending June 30, 1886: 854 tons of Westmoreland gas coal, at a cost of \$4.10 per ton of 2,240 pounds; 48 tons of Cannelton coal, at \$11 per ton of 2,240 pounds.

Mode of purifying: Glens Falls Joint a lime.





BELL BROS., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

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VIEW OF ACADEMIC BUILDING U.S.M.A. WEST POINT.
SHOWING PROPOSED ADDITION ABOVE PRINCIPAL CORNICE.

STEPHEN D. HATCH.
ARCHITECT.
NO 115 BROADWAY N.Y.

Amount of lime used: 168 barrels, at \$1.12½ per barrel.

Number of street lamps: 48, which includes lamps in camp, which are used only during the summer encampment.

The improvements required for good service and economy: A new gas-holder, of same capacity as present one, and a station-meter. In fact, the present works are strained to their utmost capacity, and should any accident happen to the only holder we would be without gas until repairs could be made.

WATER-WORKS.

Four miles 112 yards, 6 inch cast-iron supply pipe from Round Pond to Delafield receiver; 3,498 feet 6-inch cast-iron supply pipe from Sinclair Pond to water-house; 858 feet 4-inch cast-iron supply pipe from Crow Nest Pond to intersection of Sinclair Pond line.

	Feet.
12-inch cast-iron water main	3,559
7-inch cast-iron water main	2,325
4-inch cast-iron water main	3,113

Respectfully submitted.

C. H. ROCKWELL,

Captain, Fifth Cavalry, Quartermaster Military Academy.

The ADJUTANT, UNITED STATES MILITARY ACADEMY.

The facilities for the supply of water for domestic and sanitary use, for ornamental purposes, and as a fire protection are believed to be ample. Valuable suggestions made by former Boards of Visitors, notably that of 1884, as to water supply and for bettering of drainage and sewerage, have been adopted. The facilities for bathing are good, and the regulations for cleanliness, both of quarters and person, are such as can only flow from abundance of good water. In the event that the gymnasium (hereinafter recommended) to be erected should be built, additional baths as an important incident thereto will be needed.

In the interest of public decency, and to prevent defilement of the grounds, latrines with copious flow of water should be erected for public use.

The Military Academy, a model in many respects, can well afford to set the example to American communities of those conveniences for public use naturally required where people congregate, and the absence of which in our cities is a fertile source of much disease and impurity.

The gas-works, as will be seen by the above report of Captain Rockwell, quartermaster, "are strained to the utmost capacity." They should be enlarged, and your committee suggest that the electric light, in the interest of better illumination and greater economy, could be well introduced. The power to create it could also be used for other important purposes, among them, to give the motive power to the repair shops, the reconstruction and rearrangement of which is hereinafter advised.

While most of the buildings of the Military Academy are ample and well adapted for their uses, there are some that are unfitted in many respects; and to enable this admirable military school to keep pace with the times and abreast with other educational institutions of the country, considerable expenditure is absolutely necessary. Many of the changes herein recommended have been advised by former Boards, and it is matter of sincere regret to your committee that their admirable suggestions in this regard have not been adopted.

The main question for the decision of the committee and the Board of Visitors was the disposition which should be made of the academic building. Its modification or change so that it would be properly adapted to all the requirements of instruction would be extremely ex-

pensive, and the structure when so changed would be illy fitted, by reason of its defective light and location to the needs of some of the departments, notably that of chemistry.

The erection of a new edifice and the modernizing of the present building would also be very expensive, but the result obtained would be commensurate with the expenditure and place the Academy where it should be in comparison with other schools. Recognizing the importance of the questions involved, the committee, at the suggestion of the Board of Visitors, requested General Merritt to obtain and report the views of the Academic Board. In compliance therewith the following letter and report are submitted:

OFFICE OF THE SUPERINTENDENT,
UNITED STATES MILITARY ACADEMY,
West Point, N. Y., June 23, 1886.

Senator CHARLES F. MANDERSON, *Washington, D. C.:*

SIR: In compliance with the request of the Board of Visitors, contained in letter of 12th instant, I have the honor to inclose herewith a copy of report setting forth the views of the Academic Board, as a body, upon the necessity for the erection of additional buildings at the Academy, as well as the desirability of a change in the academic building.

I am, sir, very respectfully, your obedient servant,

W. MERRITT,
Colonel Fifth Cavalry, Bvt. Maj. Gen., U. S. A., Superintendent.

The Academic Board are of the decided opinion that increased facilities for instruction are now absolutely essential to the best interests of the Academy. For the accomplishment of this end in a permanent and economical manner, they recommend—

- (1) The erection of a suitable gymnasium in a separate building.
- (2) The erection of a separate building to accommodate the departments of chemistry and philosophy.
- (3) The modification and renovation of the present academic building to meet, as nearly as possible, the requirements of the other departments of instruction, viz, mathematics, engineering, modern languages, drawing, history, ordnance and gunnery, law and tactics.

The reasons for such opinion are, briefly—

(1) The present gymnasium is poorly adapted for its purposes, entirely preventing certain physical instruction which it is desired to give. It is badly lighted and ventilated, and is too small. Due to its location, the noises necessarily attending certain exercises therein seriously interfere with the instruction in the academic departments.

These defects would not exist in a new gymnasium, and, in addition, it would furnish a much-needed hall for the social entertainments of the cadets, for any military exercise deemed desirable in winter, and for graduating exercises in summer.

(2) The department of chemistry is not now prepared with facilities for the best instruction in the subjects embraced (chemistry, electricity, mineralogy, and geology). A properly fitted building for this purpose must be of special construction to a certain extent. The requirements for the best instruction in this department cannot be met by any modification of the present academic building; besides, any such attempt would deprive other departments of much-needed space.

The department of philosophy occupies space which is needed for library purposes, and must, at no distant day, seek other quarters.

Certain of the subjects embraced in the departments of philosophy and chemistry are so related that some advantages would result from having the departments in the same building, and there would be no disadvantage to such arrangement.

(3) Some of the other departments of instruction are in great need of space. In addition to the section-rooms, which are necessary to all and which are at present small and badly ventilated, there are urgently needed by the mathematical department two examination halls, a lecture-room, and a model-room.

For the engineering department, a lecture-room, a drawing-hall, and a room for models and appliances.

For the department of history, a lecture-room and special section-rooms for maps and diagrams.

For the ordnance department, additional room for the museum and models.

Rooms for court-martial and for meetings of the Academic Board are also very desirable.

It is believed that these much-needed facilities can be obtained by a judicious modification of the present academic building, if the department of chemistry is provided for elsewhere. The necessity for making the present academic building less liable to destruction by fire is of itself a powerful reason for modifying it.

E. W. BASS,
Professor of Mathematics.

S. E. TILLMAN,
Professor of Chemistry, &c.

W. C. BROWN,

First Lieutenant, First Cavalry, Secretary Academic Board.

WEST POINT, N. Y., June 21, 1886.

The above set forth views are most cordially concurred in. At an expense of less than \$300,000 the buildings necessary for the Military Academy for all future foreseen necessities could be erected and the modifications above referred to be made.

W. MERRITT,

Bvt. Maj. Gen., U. S. A., Colonel Fifth Cavalry, Superintendent.

The committee substantially agrees with the academic board upon the advisability of these changes and recapitulates them as follows:

(1) The erection of a building for the purposes of a gymnasium, with suitable accommodations for drill in arms during inclement weather and in the winter season. It should contain suitable apparatus, implements, and appliances for the physical training of the cadets. Those of the Board of Visitors who were familiar with the Academy in earlier days were greatly impressed with the importance of the gymnastic exercises of the school, so much in advance of that which formerly obtained, and greatly favor the continuance, enlarging, and bettering of such instruction. A building well adapted to such purposes can be erected at a probable expense of \$25,000. The present gymnasium is in the basement of the academic building, which is poorly lighted and ventilated. Former Boards of Visitors have complained of it.

In 1881 it was said:

The deficiencies of the gymnasium in all respects are deplorable.

In 1883:

There is but one opinion on the part of the Board as to the importance of continuing gymnastic instructions, and of making it more efficient by providing adequate accommodations for its development. The room now used for that purpose in the academic building falls far short of the requirements of a modern gymnasium, and is utterly unsuited to the purposes to which it is applied.

In 1884 the Board advised the erection of a new gymnasium, with baths under the same roof.

In 1885 the Board said:

The present gymnasium is unfit for the purpose, and a new one should be erected.

Certainly this much-recommended improvement should be no longer neglected.

(2) The erection of a separate building to accommodate the department of chemistry and philosophy. The modern instructions in chemistry, electrics, mineralogy, geology, &c., require special adaptation in a building as regards light, heat, and sound. These requirements cannot be obtained by any modification of the present academic building. The subjects are of the highest importance in modern science and the present art of war. The colleges and technical schools of the country are fully alive to them, but the United States Military Academy seems to be sadly behind the times, simply because it lacks the proper me-

chanical appliances for the best instruction. It is believed that the building could be erected for not to exceed \$75,000.

(3) The present academic building should be renovated and modified for the very abundant reasons urged in the report of the academic board. The building now is in great need of repair, and is simply a fire-trap, endangering the surrounding structures. It was built many years ago, and has such great defects that it has been condemned by every Board of Visitors for many years. It should be raised one story, and be made fire-proof, so far as a reasonable expenditure can make it so. The estimate for its modification is \$75,000, but by the construction of a small separate academic building for the schools of chemistry and philosophy, and a separate gymnasium, it is quite probable that \$50,000 would be sufficient for the purpose.

(4) Workshops for the quartermaster's department should be erected, at a cost of about \$12,000.

These shops are a necessity, and save the Government an immense outlay for repairs of quarters, vehicles, camp material, &c. They now consist of a number of unsightly frame structures, in a tumble-down condition, giving also much fear of disastrous fires from their inflammable and exposed condition.

They should be consolidated under one roof and arranged for the introduction of power. The committee cordially indorse the recommendation of General Merritt, and quote approvingly the suggestions of former Boards of Visitors, as follows:

From the report of 1883 we quote:

There are several old and dilapidated wooden buildings, located near the artillery and cavalry barracks, and used for workshops and storehouses. They are in the last stages of decay and crowded closely together, and are wholly unsuited to the uses to which they are put. Should a fire break out among them (an event very likely to happen), it would cause the loss of much valuable property stored in them and greatly endanger the safety of neighboring buildings. We recommend their removal and the erection of a suitable building or buildings of substantial materials in their place.

In 1884 the Board said:

There is a considerable district lying under the hill towards the north containing a large number of shabby and very old buildings. Some of these are used for shops and other public purposes, while others serve as quarters for the married enlisted men at the post. * * * They are certainly entirely inappropriate to a well-kept Government institution like this. We recommend that these buildings be replaced by suitable substantial brick or stone quarters, and we recommend a similar substitution of proper structures for all of the tumble-down shops and sheds above referred to. The existing condition has a most unsatisfactory and poverty-stricken look, and is without justification even on the score of economy.

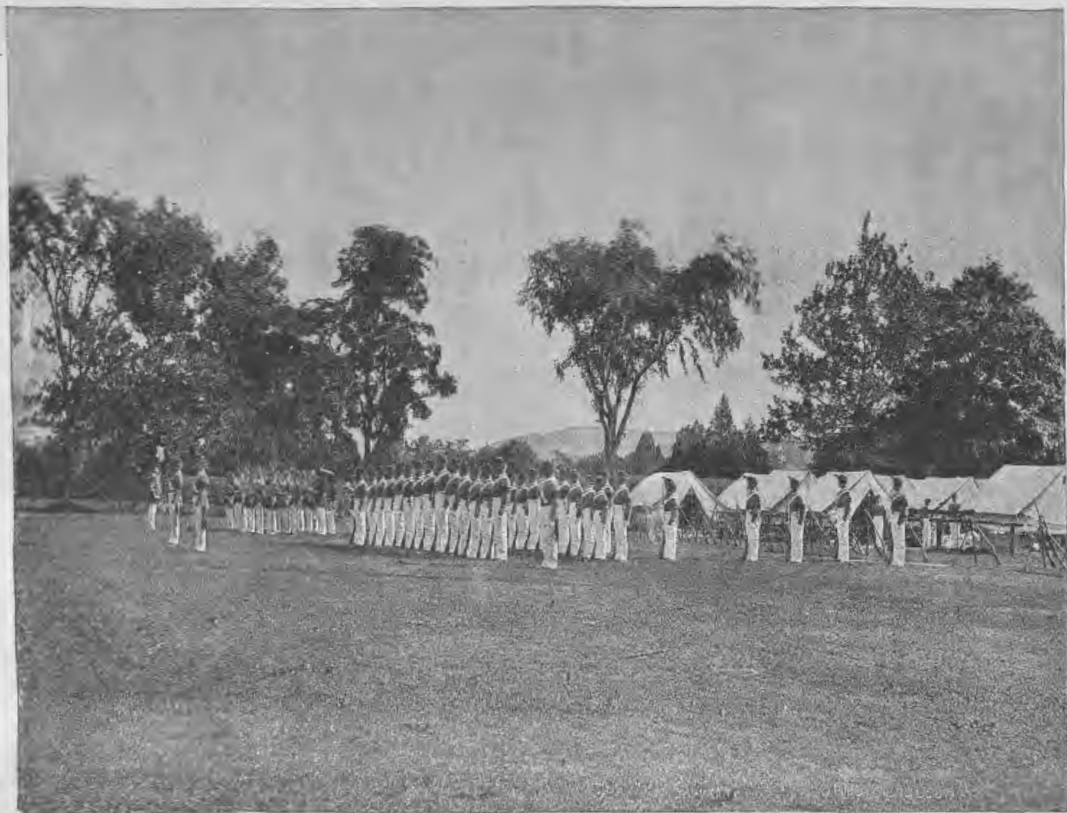
The Board of Visitors in 1885 reported:

The blacksmith and other shops are now in such dilapidated condition as to be almost unfit for use. The quarters for the families of the enlisted men are very indifferent and new ones are very much needed.

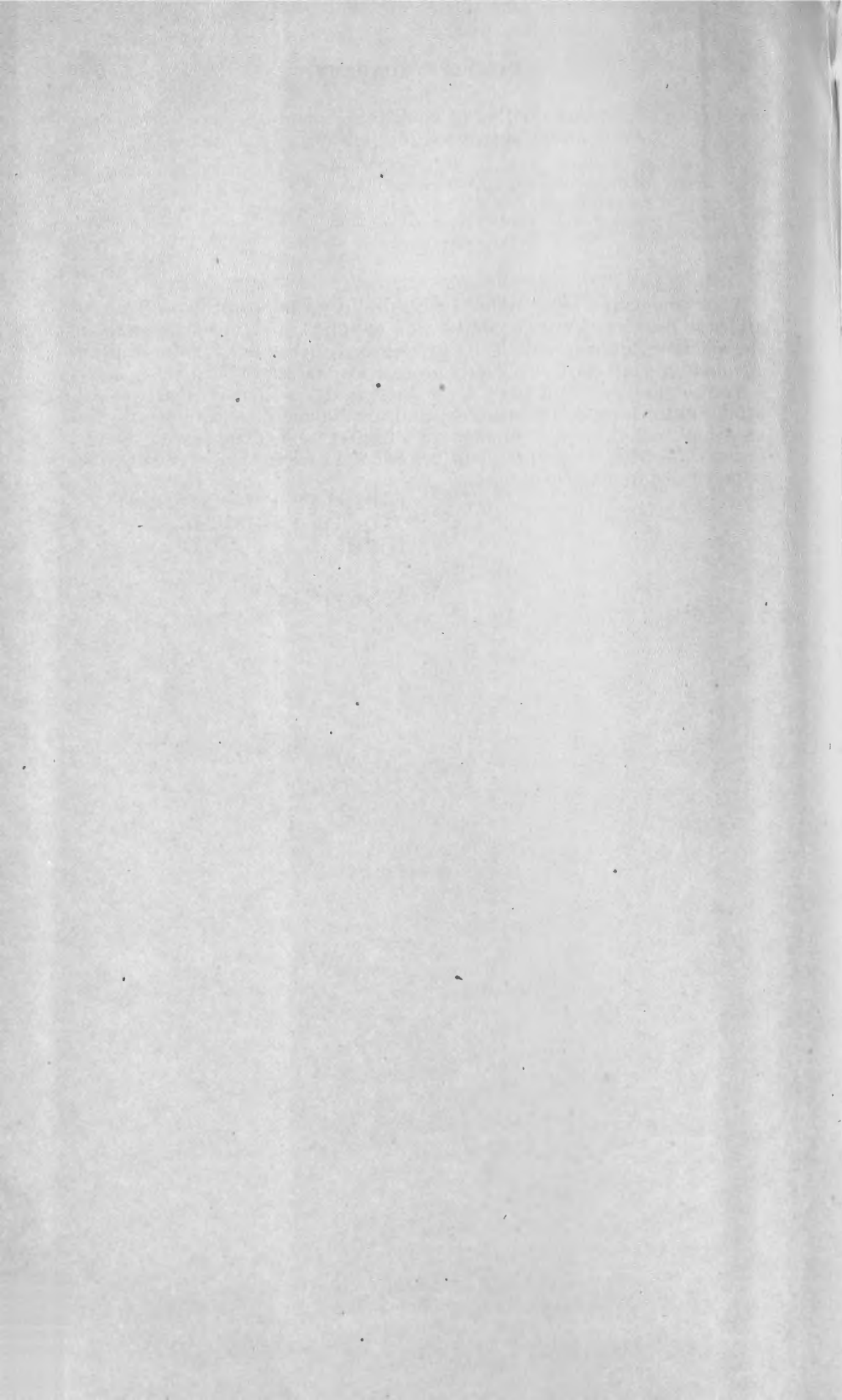
(5) Sixteen sets of quarters for enlisted men connected with the Academy, to cost, say, \$15,000.

These are much needed, the present wooden buildings being almost uninhabitable and falling to pieces from decay. This improvement has been frequently urged upon the consideration of Congress.

While there are some other and much-needed repairs and improvements, notably some buildings of modest cost that would better accommodate the Board of Visitors than the present much-crowded and inconvenient hotel, and additional room in the public library to accom-



GUARD-MOUNTING IN CAMP.



modate the increasing number of books, the committee recommend only the improvements above suggested and here briefly repeated :

(1) Gymnasium, to cost.....	\$25,000
(2) Academy for department of chemistry and philosophy.....	75,000
(3) Repair of present academic building.....	75,000
(4) Workshops.....	12,000
(5) Quarters for enlisted men.....	15,000
Total.....	202,000

Your committee believe that by the judicious expenditure of \$200,000 all these pressing wants could be well supplied, and, in the language of the efficient Superintendent, "the buildings necessary for the Military Academy for all future foreseen necessities" be supplied.

The committee feel it to be their duty, as it is their pleasure, to call attention to the excellent conduct and arrangement of the hospital and mess-hall. Both are evidently in efficient and experienced hands. General Merritt, Superintendent, afforded the committee every possible opportunity for investigation.

CHARLES F. MANDERSON.
WILSON S. BISSELL.
GEORGE P. COSBY.

APPENDIX C.

EXAMINATION PAPERS FOR CANDIDATES FOR ADMISSION.

JUNE, 1886.

EXAMINATION IN ARITHMETIC.

1. What decimal fraction, multiplied by 175, will be equal to the sum of $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{6}$, and $3\frac{1}{4}$?
2. How many miles will a ploughman walk in ploughing an acre if each furrow is one foot in width?
3. If $29\frac{14}{17} \times \frac{788}{1000}$ be subtracted from each of the two numbers, $475\frac{1}{4}$ and 2.10009, will the ratio of the two remainders, taken in order, be the same as that of the two numbers? Why?
4. On a Centigrade thermometer the freezing point is zero, and the boiling point is 100° . On a Fahrenheit thermometer the freezing point is 32° , and the boiling point is 212° . What degree on a Centigrade corresponds to 68° Fahrenheit?
5. How many pounds of tea are equivalent to $10\frac{1}{2}$ pounds of butter, when 5 pounds of tea are equivalent to 14 pounds of coffee; 9 of coffee to 20 of sugar; 10 of sugar to 6 of cheese, and 10 of cheese to 9 of butter?
6. If $44\frac{1}{2}$ guineas weigh 1 pound Troy, and 32 half-pennies weigh 1 pound avoirdupois, what is the difference, in grains, between the weights of a guinea and a half-penny?
7. \$21,000 is to be divided among A, B, C, and D. A's share is to B's as 2:3, B's to C's as 4:5, C's to D's as 6:7. What will each receive?
8. If 30 men working 11 hours a day can do a piece of work in a certain time, how many more men must be employed when it is half done in order to finish it in the same time, all working 10 hours a day on the last half?
9. The value of a pound of gold is 14 times that of a pound of silver, and the weights of bars of equal size of gold and silver are as 19:10. Find the value of a bar of silver equal in size to a bar of gold worth £1,750.

JUNE 16, 1886.

EXAMINATION IN WRITING AND ORTHOGRAPHY.

It was not only by the efficiency of the restraints imposed on the royal prerogative that England was advantageously distinguished from most of the neighboring countries. A peculiarity equally important, though less noticed, was the relation in which the nobility stood here to the commonalty. There was a strong hereditary aristocracy; but it was, of all hereditary aristocracies, the least insolent and exclusive. It had none of the invidious characters of a caste. It was constantly receiving members from the people, and constantly sending down members to mingle with the people. Any gentleman might become a peer. A younger son of a peer was but a gentleman. Grandsons of peers yielded precedence to newly-made knights. The dignity of knighthood was not beyond the reach of any man who could by diligence and thrift realize a good estate, or who could attract notice by his valor in a battle or a siege. It was regarded as no disparagement for the daughter of a duke, nay of a royal duke, to espouse a distinguished commoner.

His was the pomp, the crowded hall,
 But where is now his proud display?
 His riches, honors, pleasures,—all
 Desire could frame; but where are they?
 And he, as some tall rock that stands,
 Protected by the circling sea,
 Surrounded by admiring bands,
 Seemed proudly strong—and where is he?

- | | |
|------------------|----------------|
| 1. Agility. | 13. Collide. |
| 2. Annular. | 14. Coliseum. |
| 3. Antecedent. | 15. Dalliance. |
| 4. Artillery. | 16. Debarred. |
| 5. Ascend. | 17. Deceive. |
| 6. Barbarism. | 18. Exhibit. |
| 7. Barricade. | 19. Exonerate. |
| 8. Bigotry. | 20. Fascinate. |
| 9. Bounteous. | 21. Irritate. |
| 10. College. | 22. Grammar. |
| 11. Communicate. | 23. Menace. |
| 12. Coherence. | 24. Parallel. |

Official copy:

W. C. BROWN,

First Lieutenant, First Cavalry, Adjutant.

HEADQUARTERS UNITED STATES MILITARY ACADEMY,
West Point, N. Y., June 26, 1886.

JUNE, 1886.

EXAMINATION IN HISTORY.

Time allotted, three hours.

[Write as legibly and concisely as possible, without omitting material facts.]

1. Name the first discoverer of America from each of the following countries, and give the date of each discovery:
 - (1) England.
 - (2) Spain.
 - (3) France.
2. Write after each of the following named colonies the date and locality of the first settlement, and state to what nation the settlers belonged:
 - (1) Georgia.
 - (2) Maryland.
 - (3) Pennsylvania.
 - (4) Virginia.
3. When, and as the result of what war, were the French possessions in Canada transferred to England?
4. What were the boundaries of the territories of the United States after the close of the Revolutionary war?
 - North.
 - South.
 - East.
 - West.
5. When and where did each of the following events occur?
 - (1) The first colonial Congress.
 - (2) Burgoyne's surrender.
 - (3) Arnold's treason.
6. Name two defects in the articles of Confederation which made it necessary to form a new Constitution for the United States.
7. Where and when was the first Government organized under the present Constitution?
8. Under whose administration did each of the following events occur?
 - (1) The Louisiana purchase.
 - (2) The nullification act.
 - (3) The Missouri compromise.
 - (4) The Gadsden purchase.
9. When and from whom was the territory acquired which is comprised in each of the following-named States?
 - (1) Texas.
 - (2) California.
 - (3) Florida.
 - (4) Arizona.

10. Name three States of the Union which have been admitted since the adoption of the Federal Constitution and which formerly belonged, wholly or in part, to other States of the Union.

11. Name the States in the Union in which slavery existed in 1861?

12. Which of the slave States passed the ordinance of secession and which remained loyal to the Government at Washington?

13. Give the names, dates, and immediate results of six important battles of the civil war?

14. What text-books in United States history have you studied?

JUNE, 1886.

EXAMINATION IN ENGLISH GRAMMAR.

Time allotted : two and one-half hours.

DIVISION I.

[N. B.—Write the answers below, numbering them to correspond with the questions.]

1. What is *declension*? Decline *child, who, he*.
2. Write the plural of *dwarf, fly, pen, ox, footman, calf, handful, cargo, chimney, potato*.
3. What is a *sentence*? Name the different *kinds of sentences*. What is a *phrase*? What is a *clause*? Give examples of the *sentence, the phrase, and the clause*.
4. What is a *conjunction*? How do you *parse* a conjunction?
5. What is an *adjective*? Of what *inflection or change of form* do adjectives admit?

DIVISION II.

[N. B.—Write quite across both pages, if necessary. In parsing, give no rules, declensions, or principal parts; but in other respects parse fully, being careful to give the subject of each verb, the governing word of each objective case, and to state precisely what each conjunction connects, between what words each preposition shows the relation, and to what each pronoun refers. Important omissions will be taken to indicate ignorance. Intelligible abbreviations are allowed.]

Parse the words in italics in the following sentence: *In free states no man should take up arms, but with a view to defend his country and its laws; he puts off the citizen when he enters the camp; but it is because he is a citizen and would continue such that he makes himself for a while a soldier.*

DIVISION III.

Correct all errors in the following sentences, including bad arrangement of words

1. His work is one of the best that has been published.
2. No Roman emperor was so cruel nor so tyrannical as Nero.
3. Have you no other excuse but this?
4. We not only obtained Louisiana, but Florida also, by purchase.
5. Flour will not do to make our bread alone.
6. The number of inhabitants were not more than four millions.
7. They told me of him having failed.
8. But she fell a laughing like one out of their right mind.
9. What else could he do in the circumstances he was placed.
10. Whom do you suppose it was?
11. The board of directors looked gravely; in fact a frown began to settle on its face.
12. Why have you not kept the promise you have made when I was at your house?
13. Suppose Xerxes had have succeeded in conquering Greece!
14. If I were in his place, I would not have gone.
15. These flowers smell sweetly and look beautifully.
16. There is no charity in giving of money to the intemperate.
17. I have and ever shall insist on the necessity of economy.
18. The dahlia, as well as fuschia, is a native of America.
19. The spirit and not the letter of the law, are what we are to follow.
20. London is the largest of any city in Europe.
21. Am I the scholar who am to be punished?
22. The man could neither read or write.
23. Every one of your arguments are absurd.

JUNE, 1886.

EXAMINATION IN GEOGRAPHY.

1. What proportion of the earth's surface is land?
2. Which hemisphere contains the more land, Northern or Southern?
3. If one should start from a point on the equator in the mid-Atlantic and travel eastward entirely around the earth, keeping on the equator, name the bodies of land and water over which he would pass.
4. Name the five largest oceans of the earth.
5. Name all the States and Territories of the United States which touch the Atlantic, Pacific, or Gulf of Mexico.
6. Name the States east of the Mississippi which touch neither the Gulf of Mexico, the Atlantic, nor the Great Lakes.
7. Bound the following States and Territories: Idaho, Arizona, Indian Territory, Minnesota, Kentucky, North Carolina, and Vermont.
8. What States and Territories lie in part or wholly west of the Rocky Mountain system?
9. Locate definitely the following places, stating upon what waters they are situated: Montgomery, Macon, Shreveport, Little Rock, Austin, Albuquerque, Sacramento, Cheyenne, Detroit, Harrisburg, Bangor, Milwaukee.
10. If a man should start from Santa Fé and go due north to the British line, through what States and Territories would he pass?
11. The parallel of Saint Louis, between the Atlantic and Pacific, passes through what States and Territories?
12. What political divisions of South America, between its most easterly and southerly points, border on the Atlantic Ocean?
13. In going from St. Petersburg to Bombay by steamer, nearest route, over what waters and by what countries would you pass?
14. What countries of Europe touch Austria?
15. Where is Beloochistan?
16. Where is Nankin; upon what water is it situated?
17. What is the general direction of the Hiang Ho or Yellow River; where does it empty?
18. Where is Cambodia; to what country does it belong?
19. Where is the Gulf of Salonica?
20. Where is the Strait of Otranto?

APPENDIX D.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., January 5, 1887.

DEAR SIR: In compliance with your oral request of day before yesterday, I have the pleasure of inclosing a statement showing the aggregate amount of gifts and legacies to twenty institutions of learning in this country between the years 1876 and 1885, both inclusive.

No special attempt was made to select these institutions on account of the amounts received by them. The most of them are colleges attended by young men only. Wellesley College, however, is a college for women. Four theological seminaries are mentioned to show how modern learning, even in that direction, requires an increase of endowment and income. Cazenovia Seminary is mentioned as a specimen of the great number of academies annually receiving gifts and legacies for the improvement of their resources as teaching centers.

In using these statistics, please remember that the sums mentioned are only a small part of the tremendous amount of money given every year to American schools and colleges of various kinds.

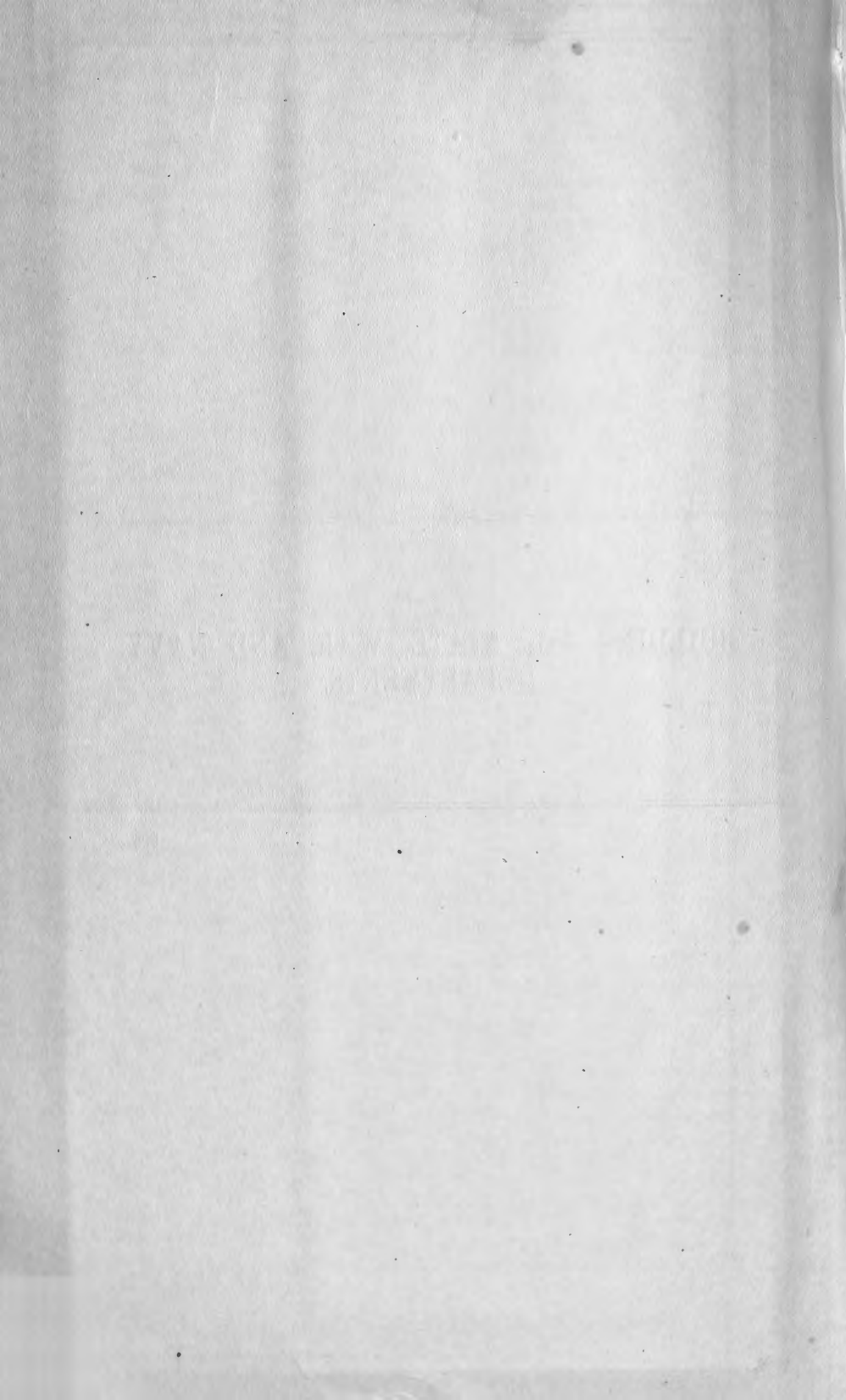
For the two years 1876-'77 this entire amount was \$7,707,101; for the two years 1878-'79, \$8,353,099; for 1880-'81, \$12,953,725; for 1882-'83; \$7,141,363; for 1884-'85, \$20,584,317; and for the entire period, 1876 to 1885, both inclusive, \$56,739,605.

Very respectfully,

WM. H. GARDINER,
Acting Commissioner.

General E. L. VIELE, M. C.,
House of Representatives, City.

BUILDING FOR STATE, WAR, AND NAVY
DEPARTMENTS.



REPORT

ON

BUILDING FOR STATE, WAR, AND NAVY DEPARTMENTS.

OFFICE OF
BUILDING FOR STATE, WAR, AND NAVY DEPARTMENTS,
Washington, D. C., October 1, 1886.

SIR: I have the honor to submit the following report of operations upon the building for the State, War, and Navy Departments since the date of the last report, July 1, 1885:

Operations have been confined to the west and center wings, on which they have progressed without interruption except during a short period of the winter weather, when masonry work could not be safely carried on.

The masonry work of granite and brick, which had been carried at the date of the last annual report to about the level of the second story floor, had reached the main cornice on the front by October 30; to the tops of the court-yard walls by December 12, and nearly to the attic-floor level on the front and interior by December 17, when that part of the work was stopped by the weather.

Putting in place of the iron door and window frames under contract was begun on August 12, 1885, and has been continued very steadily to the present time.

Nearly all of these frames together with the washboards are now in place, from the sub-basement up to the third story inclusive, and a large number are finished in the fourth story.

The third-story floor-beams were laid in the latter part of August, 1885, and those of the fourth floor two months later.

During December 21-26 the large water-service pipe was laid out and connected to the city main in Seventeenth street.

During January 5-7 the gas-service pipe was laid by the Washington Gas Company and connected to their mains in Seventeenth street.

On February 1 the construction of the heating and steam apparatus was begun by excavation for the boiler settings in the sub-basement. Pipe-work was begun soon afterwards and the entire apparatus has now been essentially finished, except the final closing in of the heating chambers in the sub-basement.

The sub-basement floor has been paved with brick throughout and all the pipe trenches constructed. The latter are now being provided with cast-iron covering plates by a contractor.

On March 22, 1886, the masonry work was resumed and continued steadily until the stylobate stones of the center pavilion were set, about April 15, and the last stone of the building, being the top of the pedi-

ment dormer of the center pavilion, was put in place July 9, 1886. The first granite stone of the building was laid at the starting of the south-wing walls on February 2, 1872.

The first of the five derricks was taken down about May 20, since which time two others have been lowered, leaving two standing for the iron work of the center pavilion roof.

On April 16 the erection of the iron work of the roof was begun by the contractors, who have been steadily employed upon it ever since. At this date all the iron work of the long curtains and the center wing, excepting ventilator-tops and the acroteria on the curtain dormer windows, is complete.

Of the small pavilions and curtains, the frame-work and most of the cast iron trimmings and ornaments are in place and one of the two chimneys is finished. All of the main frame-work of the center pavilion is now built, a portion of the cornice fastened to it, many of the purlins on, and the five rear dormer window frames set up in place. Two of the four center pavilion chimneys are in process of erection.

Fire-proof lathing of ceilings and the erection of iron partitions was begun by a contractor on June 21. He has up to this time finished his work in the basement and first story, and is now working in the second and third stories.

The work of building the two granite stairways in the center pavilion was begun on June 23, 1886. Without even the slightest mishap it proceeded rapidly to completion, which was accomplished on August 26.

Concreting the curtain and center wing roofs and preparing them for the copper covering was accomplished between July 7, 1886, and the middle of August.

The laying of the gas-piping throughout these wings was begun on July 20, 1886, and is now nearly completed.

On June 24, slating of mansards was begun at the north end of the west wing. That of the two long curtains and center wing was finished in the middle of August. Since then the fronts of the small pavilions and curtains have been slated as far as the completion of the iron-work will permit.

Laying of the sheet-copper was begun on August 16, and is still in progress. About two-thirds of the long curtain roofs and most of the center wing roof are now covered.

The iron-work of the stairway dome has been manufactured and is now being delivered at the building, but its erection must further await the completion of the center pavilion roof-frame by the contractor for that work.

The iron-work of the library, to occupy the attic story of the center pavilion, is in an advanced state of manufacture by the contractor, and is expected to be ready to go into place when the roof is closed in.

Leveling up the floors with concrete was begun in August last, and the laying of sleepers for the board covering of the same in office rooms in September last. At this date the basement floors are finished in these respects; also a part of those of the attic rooms, and all of the corridors.

On August 28 the backing up of mansards with brick-work was finished.

On August 18 the work of removing the temporary walls across the corridors between the new wings and the south, east, and north wings was begun, and has since been completed, excepting in the basement and sub-basement stories.

A large temporary building for mortar-making has been erected in the north court-yard, and contracts made for the materials and labor for the plastering and stucco work throughout those wings to be done during the coming winter.

Contracts have also been made for all the plumbing materials and electric cables required.

All the flooring boards and sleepers are on hand, piled, and seasoning in front of the building. Considerable progress has already been made in the manufacture of the mahogany window-sashes. The bronze balusters for the main stairways are being furnished under contract.

All the cut granite and bluestone flags required for the approaches in Seventeenth street are under contract to be delivered next spring.

Tabular statement of contracts.

Date of contract.	Subject of contract.	Name of contractor.	Amount.	Present condition.
1885.				
Apr. 29	Iron window and door frames and washboards.	William H. Jackson & Co.	\$70,633.10	In force.
July 13	Cut granite for stairways.	Cape Ann Granite Company.	\$24,737	Completed.
Aug. 5	Iron-work of library	Snead & Co. Iron Works	\$26,840	In force.
Nov. 9	Roofing slates	John Jones	84 cents each	Do.
13	Mahogany and black-walnut lumber.	Henry Otis	Mahogany, 11 cents per foot; walnut, 9 cents per foot.	Completed.
12	Yellow-pine flooring boards and scantling.	Frederick W. Norwood.	Flooring, \$35.50 per M; scantling, \$31 per M.	Do.
Dec. 3	Bronze balusters	Deoxidized Metal Company.	\$7,013.12	In force.
22	Boilers, tanks, &c., for heating apparatus.	Samuel I. Pope & Co ..	\$9,279.44	Completed.
22	Flange, pipe, &c., for heating apparatus.	do	\$23,279.18	Do.
22	Fittings, valves, &c., for heating apparatus.	Walworth Manufacturing Company.	\$7,970.10	Do.
22	Wrought-iron pipe for heating apparatus.	do	\$1,638.12	Do.
1886.				
Jan. 29	Iron-work of roof	Snead & Co. Iron Works	\$56,688	In force.
Mar. 15	Iron-work of dome	Builders' Iron Foundry	\$10,500	Do.
19	Bricks	Washington Brick Machine Company.	Red, \$7.37 per M.; skewback, \$8.50 per M.	Do.
19	Sand	R. M. Miller	93 cents per yard ..	Do.
Apr. 13	Cement	Joseph M. Wheatley ..	\$1.14 per barrel	Do.
22	Paints, oils, &c.	W. H. Butler	\$1,563.55	Do.
19	Roofing-copper, galvanized iron, &c	C. G. Hussey & Co ..	\$9,796.34	Completed.
May 15	Lathing and partitions ..	John W. Hoyt	Partitions, 29½ cents; architraves, &c., 20 cents; ceilings, 16 cents per square foot.	In force.
22	Pebbles	John B. Lord	\$1.30 per cubic yard.	Do.
June 24	Gas-pipe and fittings ..	Robert Leitch & Sons ..	\$601.47	Completed.
Aug. 14	Iron trench plates	White's Sons	Reeded, 53 cents, diamond, 35 cents per square foot.	In force.
14	Electric cables	Standard Underground Cable Company.	10 wire, 16 cents; 25 wire, 28 cents; 40 wire, 44 cents per linear foot.	Do.
Sept. 1	Bluestone flags for approaches.	Richard Rothwell	63 cents per square foot.	Do.
11	Cut granite for approaches.	Davis Tillson	\$11,050	Do.
25	Sand for plastering	John B. Lord	\$1.05 per cubic yard.	Do.
25	Earthenware and brass-work for plumbing.	Myers' Sanitary Depot ..	\$1,684.03	Do.
25	Iron pipe and fittings for plumbing.	Fred. Adee & Co	\$1,300	Do.
25	Lead pipe, sheet lead, &c. for plumbing.	M. Reynolds & Cq	\$629.30	Do.
28	Plastering and stucco work.	Smith & Crimp	\$26,640.10	Do.
29	Lime	F. M. Lee	56 cents per barrel ..	Do.
29	Plaster, hair, and white sand.	J. H. McGill	Plaster, \$1.16½ cents per barrel; hair, 19½ cents per bushel; w. sand, 12 cents per bushel.	Do.

PROBABLE OPERATIONS FOR THE FISCAL YEAR 1886-'87.

Before winter it is expected to have essentially completed the roof and glazed the skylights, making the building quite ready for plastering and stucco work, which it is intended to begin in November next, and complete before the close of this fiscal year. For this purpose, also, the cast-iron door and window frames, and washboards, and all the iron lathing, and partitions are to be completed during this fall.

By the end of the fiscal year, it is expected, all the plumbing will be completed; also, the construction, glazing, and hanging of the window sashes. It is further expected, by the end of the year, that the interior painting will be well advanced, the main stair railing put up, the stairway dome and library iron-work erected, the elevators constructed, and considerable progress made in tiling the corridor floors, and in the construction of the approaches to the west wing.

It is still estimated that the building will be entirely finished by the winter of 1887-'88—probably in January of 1888.

STATEMENT OF FUNDS.

Revised estimate of cost of west and center wings.....	\$2,163,478 61
Amount appropriated up to and including the appropriation of \$500,000 in act of August 4, 1886.....	2,163,478 61
Amount expended to October 1, 1886.....	1,561,264 67
Balance on hand October 1, 1886	602,213 94

Very respectfully, your obedient servant,

THOS. LINCOLN CASEY,
Colonel, Corps of Engineers.

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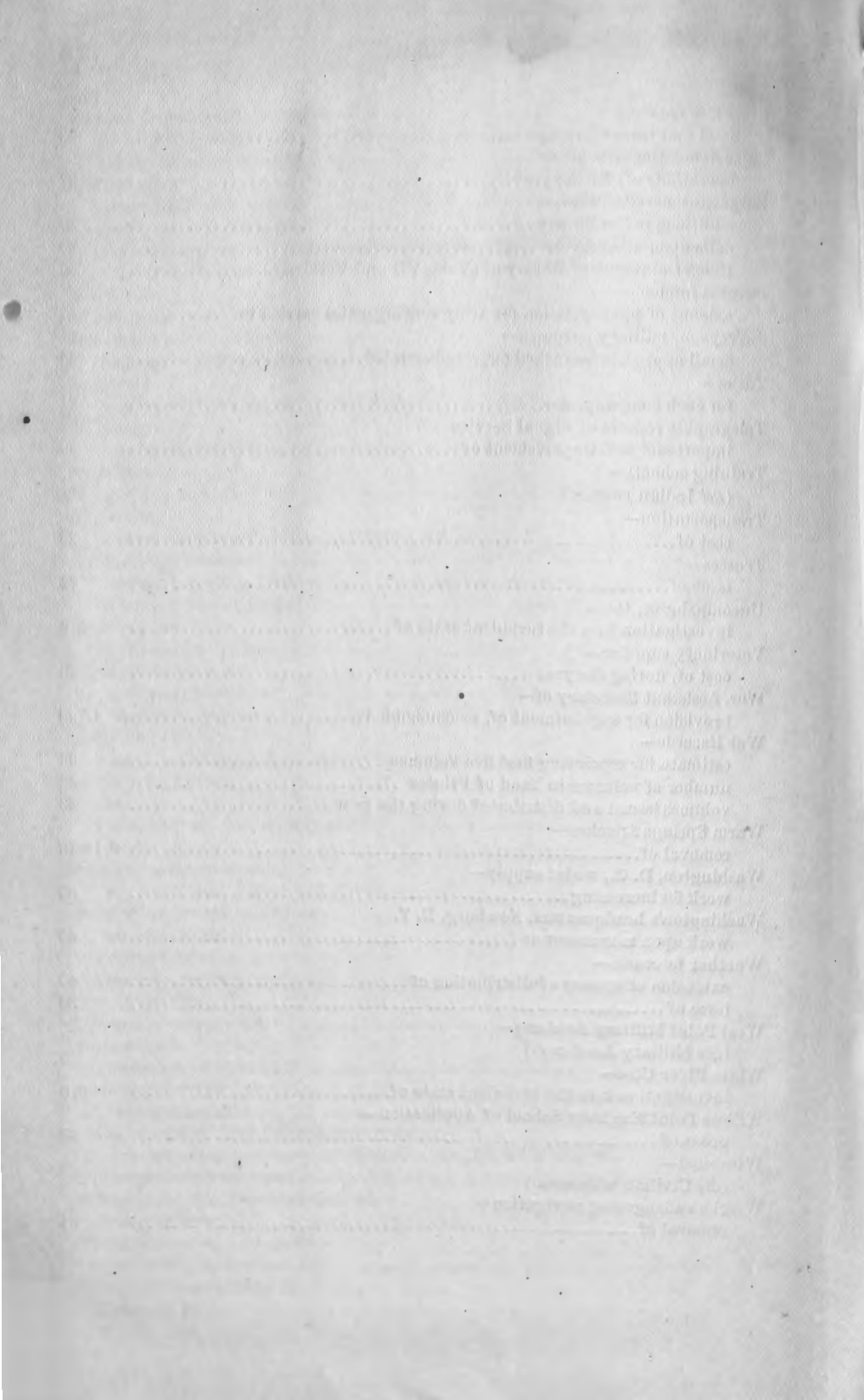
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